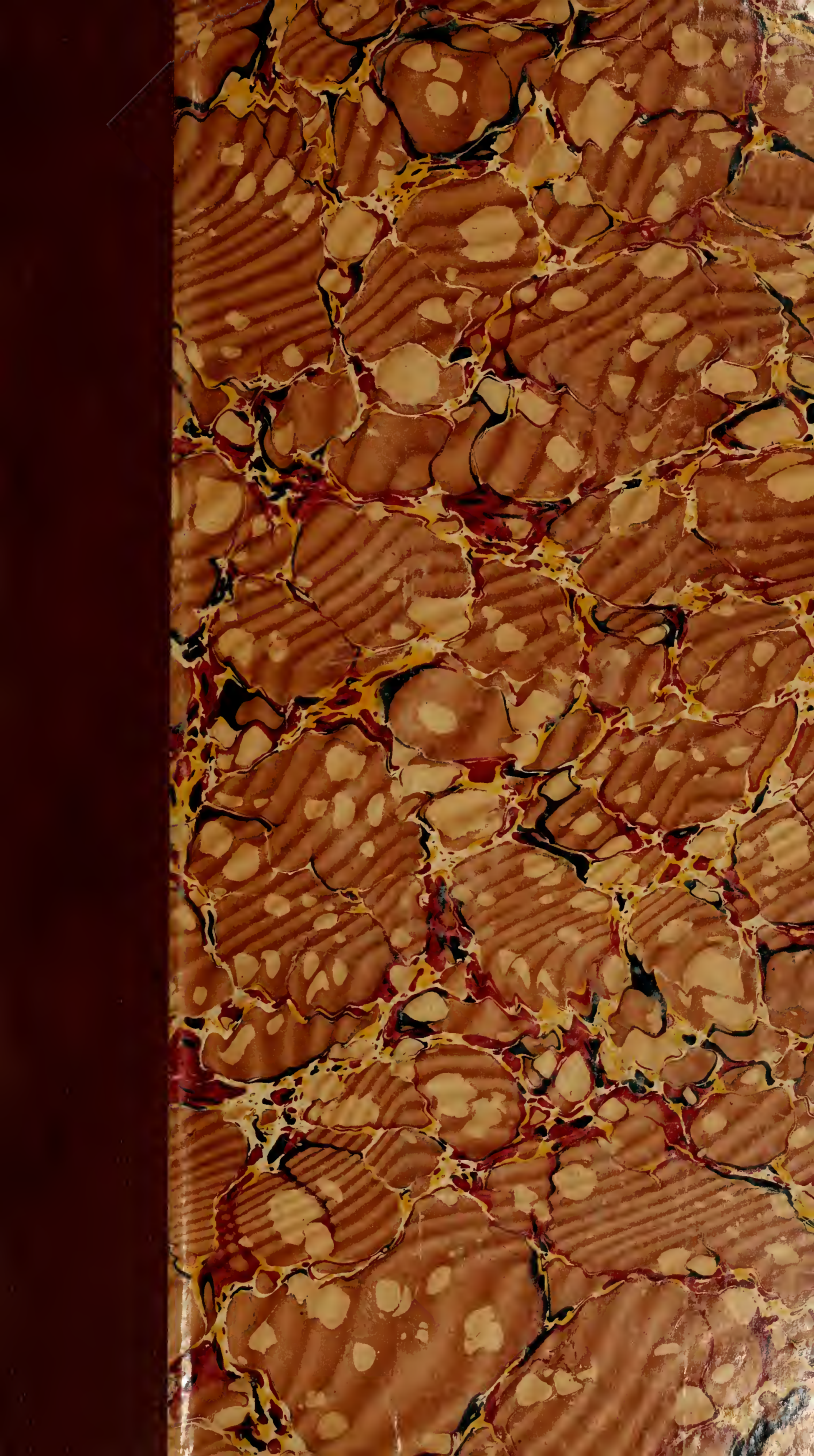




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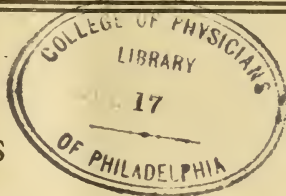
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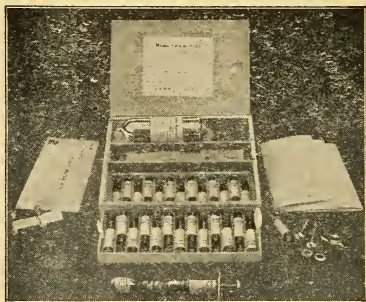
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The Charlotte Medical Journal

VOL. LXVI

CHARLOTTE, N. C., JULY, 1912.

No. 1.

The Profession and the State.*

By A. A. Kent, M.D., Lenoir, N. C.

Fellow Members of the Medical Society of the State of North Carolina, Ladies and Gentlemen:

Before entering upon the discussion of the subject chosen for my discourse today, I wish again to express my deep appreciation of the honor you, my fellow members, conferred upon me in making me the president of our State Medical Society. It is, indeed, a signal honor to be called upon to preside at this our fifty-ninth annual meeting over so distinguished a body of professional men. It is a greater honor to have been chosen to be the head and director, for a year's time, of an organized body of men, such as this, whose members touch all the people, and hold in their keeping the lives, health and welfare of the people of a great State. I trust that the year of earnest endeavor on my part has not failed to help keep alive the interest and enthusiasm of the profession in our organization, and that my efforts to weld a stronger bond of sympathy, and to institute a more active co-operation, between the profession and the people of the State, may result in some good to both profession and people.

I desire to speak briefly of the proposed revival of our Constitution and By-Laws, which awaits the action of our organization at this meeting. It is perfectly natural that opinions should differ as to the best plan of organization for any society. It is equally natural, and to be expected, that in their zeal for the welfare of the society the members should differ, not only radically but energetically, on some points; and such is the case in regard to our Constitution and By-Laws. As president of our society, I have discussed freely, with both sides, these matters of difference, and have reached the conclusion that all regard the welfare of the society of paramount consequence to the success of either side to this controversy, and that it can be best served by a compromise of views. Each should yield something, and yet each may have in our organization that which he most cherishes. The Committee on Revisal will offer, as a substitute for the revised constitution now pending action, amendments which leave the House of Delegates just as it is now consti-

tuted, except that in place of electing the officers of the society, it will elect its own presiding officer and secretary. The election of the officers of the society will be done in the open society, nominations to be made by any member of the society on the floor, and without the aid of a nominating committee. This arrangement should, in my judgment, be acceptable to every member here present. Many members have expressed to me their hearty indorsement and purpose to support it. It is my earnest wish and request, as your presiding officer, that it shall be unanimously adopted in the House of Delegates and in the general meeting. The only change of any material consequence is the giving to the general body the privilege of electing its own officers.

And now, I invite your attention for a short while to the consideration of my subject, "The Profession and the State."

Every new invention or discovery, that admits of practical application to man's use, brings with it new fields of activity. Often a new discovery opens up a new field of thought, and both operating together in practical utility to man's advantage, project new lines of endeavor, and new and hitherto unrecognized obligations on the part of the profession, the State, and the nation. A few years ago we knew little or nothing about disease producing organisms. Their origin, propagation and distribution were unknown mysteries, wrapped in ignorance and superstition. But, thanks to modern laboratory research, the germ cause of disease has been revealed, and today we are able to meet it at the threshold, and to fight it in the open; we meet the enemy on his own ground and match his cunning with our skill. In consequence of these recent discoveries the medical profession is in a transition period. We are passing from the age in which the object and end of all medical knowledge was that of healing the sick into an era in which the highest aim and purpose of the profession is to keep the people well. In this great and growing work of protecting the health of the public the profession and the State must both take an important and active part. The welfare of the people of the State is firmly bound up in the harmonious co-operation of the profession and the State. The profession must lead the way, as it always has done, in matters of a medical character. The profession must be the active instrumentality

*President's address delivered at the Hendersonville meeting of the North Carolina Medical Society, June 18-20, 1912.

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in the execution of all measures, having for their object the preservation of the lives and health of the people. The State must take an active part in educating the people along lines of preventive medicine. It must enact and help to enforce all needed health laws looking to the public welfare.

A very large part of our program for this meeting is given to the consideration of how we may better conserve the public health. We have a full and interesting list of subjects under the Section on State Medicine. In it we have the very great honor and distinction of an address from His Excellency, the Governor of the State. This is the first time in the history of our Society that a Governor of the State has honored our meetings by going out of the city of Raleigh to be present with us and take a prominent part in our deliberations. It is the strongest evidence that we could ask of the awakening of the State to the importance of our organization and its work. It is the best of evidence of the advantage offered at our annual meetings of an opportunity to arouse the profession and the people more thoroughly upon the public health movement that has been inaugurated by the doctors of the State. It is a literal joining of hands between the organized profession and the State in common warfare against preventable disease. Through our organized efforts, directed by the Secretary of the State Board of Health, we have done much in the way of procuring beneficent public health legislation. We have done much toward the enlightenment and direction of public opinion in regard to the great problems of State medicine. With increased forces and renewed energies, and encouraged by a live progressive Governor, we will go forward, conquering and to conquer, waging successful warfare against disease, the great enemy of mankind.

In addition to the Section on State Medicine and the Conjoint Session, both devoted to health work, we have as an adjunct part of our organization, The State Health Officers' Association. It is a worthy child of the State Medical Society, having originated with, and been organized by, active members of this society. Its deliberations on yesterday required a full day; three full sessions, for consideration. In addition to the attendance at this meeting of other prominent men of the State, who took conspicuous parts in the program, it was especially honored by the presence of another one of our most distinguished State officials, Dr. J. Y. Joyner, Superintendent of Public Instruction. His presence on this occasion is an assurance of a strong alliance between the medical profession of the State and the great educational system of the State. We,

as an organized profession, have thus joined hands with one of the greatest forces for good in the State. The educational crusade, having for its object better public health conditions, has thus received a new and tremendous forward impulse.

The profession has always urged upon the State its duty to provide adequately for its unfortunates, such as its blind children, deaf and dumb children, insane and others. The building of the State institutions for the care of her unfortunates has been brought about largely by the doctors of the State, who are always first on the scene of misfortune, in whatever phase it may present itself, and whose insistent pleadings for unfortunate humanity can never be hushed till their righteous cause is heeded. Five out of seven of these State institutions have been placed under doctors as superintendents, though this was not imperatively necessary. While they are State institutions, they are quasi medical, hence the medical profession has a larger interest in them. The medical profession is under special obligation to these institutions, and special obligation to the people of the State to make of these institutions the most that it is possible to make of them, to the end that the people of the State may derive the greatest good from them, directly and indirectly. We, as a profession, should always bear in mind that they are peculiarly *our* institutions, because we are largely responsible for their existence. When the superintendents are chosen from our profession it brings added obligation and responsibility, along with remunerative positions.

I raise the question of whether we, as a profession, are doing the most good through these institutions to the people that it is possible for us to do. I do this, not for the purpose of criticizing, but for the purpose of provoking thought and suggestion. I have visited these institutions and can testify that they are admirably well kept. The work of providing for the wants of the inmates, and the teaching and training, in those that admit of it, are excellently well done.

It is not enough in this day of preventive medicine that we should be content with merely providing properly for the care and education of the blind children that are sent to the school for the blind. It is infinitely better that we take the proper steps to prevent children from becoming blind. It is a sad commentary upon the profession and the people of the State that one-third of the blind children of the State are unnecessarily blind. They are blind because their eyes were not properly washed and disinfected at the time of their birth. I am pleased to state that the Superintendent of

our State school for the Blind is making great effort to educate the people and the profession on this point. The very best means that he could fall upon to reach the profession and the people on this subject would be for him to prepare a paper on this subject, annually, and come before this body of physicians and read it. Through this organization he could most effectually reach the profession and the people. The last legislature made it a misdemeanor for any midwife or doctor, to fail to use the proper means for the preservation of the newly born infants sight. Although we have this beneficent legislation on our statute books, the profession, the midwives and the people remain ignorant of it. We must include this in our crusade of education. When the people and the profession understand these things we will then have fewer children doomed to a life of perpetual darkness.

The profession and the State are in hearty accord in the State's work of providing for the education and training of the State's deaf and dumb children. It is being most excellently done in an institution well built and equipped, and under the management of a most excellent superintendent. But, so far as I know, no statistics have been furnished to the medical profession, showing what percentage, if any, is due to preventable causes, and calling attention of the profession and the people to their duties along these lines. Again I would recommend the advisability of the superintendent preparing annually a paper on some subject relating to the causes of deafness in children, and presenting it before the Section on State Medicine of this society.

The three hospitals for the care of the insane of the State are regarded more especially as medical institutions. The State is appropriating large sums of money annually for the support and further enlargement of these institutions. They are well kept, and the inmates properly cared for. But so far as I am informed, no research work is being done in any of these institutions with a view to determining the relative frequency of the many causes of insanity, and for the purpose of the dissemination of knowledge of what may be done to prevent any part of it. Every practitioner of much experience is aware of the fact that some of our insanity could be prevented, and yet the profession and the State are asleep, so far as any substantial work is being done along this line. We need to be awakened by the medical men in charge of these institutions. There is no better place for the awakening to begin than in the meetings of the State Medical Society. We occasionally have papers read before our body by members of

the profession from these institutions, but they are not as frequent as they might be. The superintendents are falling short of the very best opportunity of serving the State and the people by failing to attend our meetings, and reading before us practical papers, setting forth in plain terms what we, as family physicians, may do to protect those with whom we come in contact against this dread misfortune. If the marriage of cousins is a common cause of deafness, blindness, idiocy and insanity, the fact should be so impressed upon the profession and the State that the people would become educated to the point where they would abhor it as they now abhor the marriage of brother and sister. If our modern system of education, especially that of pushing and over taxing the nervous strength of young girls, is developing a race of neurotics and lunatics, the sooner these heads of institutions and the whole medical profession speak out against it in thunder tones that must be heeded the better for the race.

The profession is duly awake to the fact that tuberculosis is a contagious and infectious disease. We have not been remiss in our efforts to educate the people on this point. We have been so insistent in teaching it that we have induced the State to undertake the laudable work of building and supporting a State sanatorium for the treatment of some part of our tuberculous patients. Are we, as a profession, doing our full duty to that institution? We should bear forcibly in our minds that it was built because of our earnest representations, that the State and the nation must take part in the crusade against the "great white plague." We must now give it such moral and practical support as to make it a great force for good in the State. It is only through our efforts that it can be brought to be properly understood by the people, and so patronized as to fulfill its mission for good to the people of the State. If it is not doing all the good that we as a profession promised that it would do, we are failing of our obligation to the State and the people. I ask that you give to it your most loyal support and co-operation. Remember that it is a gift of the State to suffering humanity, as a result of our petition.

One other institution, the School for the Feeble Minded Children, is now being built by the State. The constitution adopted in 1875 provided that the legislature should, "as soon as practicable" devise means for the education and care of these unfortunate. This provision of the constitution of the State had not been complied with, till the Governor and a few doctors of the State urged it so forcibly upon the last legisla-

ture that it was induced to comply with this requirement of the constitution.

Feeble minded and idiotic children, intellectually considered, remain children all their lives, and are so spoken of. It is a condition due to arrested development of the mind before birth, or from disease in early childhood. Some of them never attain to a development of mind beyond that of an infant, others may attain to that of a child one or two years of age, while others to that of eight or ten years or more. There are all grades and shades of development among them. Though they are the subjects of the tenderest love and care of their parents, because of their mental deficiency, they are always a source of mortification and shame to the family, and are frequently kept shut up, or hidden from the sight of the world, like skeletons in a closet. The most helpless of them must of necessity, sooner or later, become dependent upon the public for support. The higher grades become paupers, tramps and criminals, or the subjects of corruption and debauchery, in the community in which they live. They are continually bringing forth a new generation of defectives and dependents. Society cannot escape its obligation to these children. The State has recognized its duty to them, and is building an institution for their care and development. It has never taken a more humane step, or made a better business investment, than in providing an institution where the lowest grades of them can be so trained that they may, at least, lead a harmless, happy and contented life, and that the higher grades may be educated and trained in youth for some form of useful work, by which they may employ themselves in productive labor, thus contributing to their own support; and above all, that the endless chain of reproduction of their kind may be largely stopped. There are some two thousand of these children now in this State. "We must have in every intelligent community in the State a strong public sentiment that demands, as right, that every American child, however defective, shall be educated and trained, at the public expense, according to his needs and capacity." To the medical profession of the State and the teachers of our schools we must look for the development of this sentiment. The institution should be so equipped and manned that it may do research work of the most scientific kind, looking into the causes of this trouble, and the best methods of protecting society and the State against the further propagation of mental defectives. The knowledge thus obtained should, from time to time, be brought to the attention of the medical profession by papers read before this society.

If we simply stop with the care of the unfortunate individuals who are sheltered in this institution, our efforts for good will fall far short of its possibilities. It is a greater work to have prevented the birth of one of these unfortunates than to have provided shelter for ten of them. The State Medical Society is the instrument through which this work must largely be accomplished. It is an organized body of men, whose members come in touch with all the people of the State. Through them all scientific information of a medical nature can best reach the people.

While the profession must and will lead, as it always has done, it should ever be borne in mind that no legislation is justifiable, or should ever be asked for, that has not for its primary and paramount purpose the welfare of the people. No legislation should ever be sought that is for the benefit of the profession alone. Any legislation that would limit the number of doctors and create a monopoly in their hands is objectionable. The requiring of higher professional qualification on the part of young men entering the profession has never at any time reduced the number, or even stopped the continual increase, of young men going into the profession. Yet it provides for the people young men who are qualified to render better services. It is a mistaken notion on the part of the State to think that the young men of North Carolina, in sufficient numbers, will not attain to any standard of proficiency that is set for them. I resent the idea that the young men of the mountain counties are not able, from any cause, to keep pace with the young men of any other section of the State, and that they need "special limited license" laws, or any kind of lower standard, to meet their requirements. We of the mountain counties are not distressed with poverty; we are not deprived of the opportunity for common school education, high school or college education, for that matter. Our young men are not always supporting widowed mothers as the demagogical argument puts it. On the contrary, we boast of our boundless resources, our enormous productions, our millions invested in manufacturing, our splendid schools, and our industrious, intelligent, enterprising citizenship. We wear good clothes, ride in steam cars, go to picture shows, even risk our lives in automobiles over bad roads, and can measure up to any standard that is set for us. But we have in our section, just as there are in other sections, young men who will take a short cut and easy road into a profession, that they have mistaken for an easy money-making profession, if allowed to do it. But what of the people? As it

concerns the profession, or the individual young man, it is a matter of small consequence. The real question is, whether a young man who is admitted not to be qualified to practice for our urban people should be granted a limited license, allowing him to practice upon our country people. I insist that our country people are as good as the best. They are entitled to the best of everything, especially the best of medical skill. They furnish the best young men out of which the medical profession is made. They pay more for medical services, and should have the best. The State should loose no time in repealing the law that provides for these limited license doctors, often more limited in knowledge of disease and how to treat it than in territory in which they practice. Until the law is changed, the Board of Examiners should create as few of them as possible.

It is with pride and pleasure that I point to the fact that all the medical schools of this State require the usual high school course, as a preliminary qualification, before a young man is allowed to enter upon the study of medicine, and that the medical colleges of the State require the full four years course in medicine before graduation. It is, at the same time, a source of humiliation to the North Carolina doctors that our State laws have not kept pace with the colleges and schools of this and other States, and that we are lagging so far behind other States in these respects. The three years course, the standard of our State, is now obsolete, as there are no colleges that do not require the full four years course. To change our standard so as to read four years would make no difference with any young man, for there are no longer any three year colleges. It will be no more of a hardship to put upon our statutes the usual preliminary educational qualification; for the colleges have lead out in this matter, and already require at least a high school course as a preliminary preparation. To change our State laws in these respects will work no hardship upon any one, but will restore to the North Carolina doctor his lost prestige in the other States.

Our rapidly advancing civilization demands educated men and women in every sphere of activity. The uneducated, untrained mind can not keep abreast with the progress of the times, in any scientific field of activity. This is pre-eminently true of the life-preserving and life-saving science of medicine. Our modern civilization demands the trained mind and the skilled hand of the educated doctor. An intelligent, enterprising, progressive citizenship is demanding at the hand of the State, not only common school education, but high

school education, college education, university education, agricultural education, and professional education.

The State has recognized the demand upon it for help in the education of the doctors of the State by erecting and equipping the new State Medical Laboratory Building at the State University. This is a fitting token of the State's appreciation of her doctors. It is also a declaration on the part of the State of its purpose to lend a helping hand in the education of our future doctors. The doctors of the State should in return show their appreciation of the State's effort by using their influence to the end that a greater number of young men shall take the first two years of their medical course at this State institution, in place of going out of the State, as so many of them have been doing.

The State has properly recognized the great debt that we owe to laboratory research work, which has revealed to us the true cause of most of our infectious diseases and how we may prevent them. It has provided in the State medical building a number of well equipped private laboratories, where any doctor of the State may go and carry on, for a time, his research work, without the expense of having to build and equip his own laboratory. The best field for discovery and usefulness on the part of any young doctor is in laboratory work. I commend to you these laboratories. Pellagra is today puzzling and vexing the medical profession of the country more than any other one disease. I would suggest that some of our young men take this problem into one of these private laboratories and these solve it, bringing with its solution great honor to this society, and undying fame to himself. Another problem that I would suggest for solution, is the finding of an efficient remedy for hookworm disease, that is not in itself a poison. Who will be the young doctor to find that remedy?

It is our custom, and properly so, to elect delegates to the annual meetings of the Medical Associations in our sister States. There is now, and will be in the future, more reason for this custom than there has been in the past. As our public health work grows, there will be more occasion for an understanding and co-operation with the organized profession of our sister States. A better field for practical results, is in sending delegates to other civic organizations in our own State. We need the sympathetic co-operation of the editors of the State, the teachers, and the farmers of the State, all of which have strong organizations in the State. I recommend that we elect one delegate annually to each of the following organizations: The North Carolina Press

Association, The North Carolina Teachers' Assembly, and the North Carolina Farmers' Union, and that we invite them in turn to send delegates to our annual meetings. This step will bring about a better understanding and co-operative spirit between us and these several organizations. In choosing our delegates, it should be understood that it is not a mere empty compliment that we are paying to several of our members. We should choose men of our best ability, men who are able to make a speech upon occasion, men who will know what to say, and how to say it. All delegates elected to attend the meetings of other organizations should be required to make report to the House of Delegates at our next meeting, so that we may know how well they have discharged their duties.

Great progressive movements, like great reforms, come in waves that sweep over a State, and sometimes over the entire country. We have had our great educational wave, and our great prohibition wave. Of the several great economic questions that now engage the public thought, the one that far outweighs any of the others is "better public health conditions." The time is not far distant when we shall have a great public health wave that will sweep the entire country. The health of the people will be the paramount thought in the minds of the profession and the people, and will occupy the first place in the affairs of State. The Owen Bill will have become a law, and out of it will grow a great national Department of Health, with some distinguished doctor as Secretary of Health. The nation will be engaged in building great sanitary institutions in place of great battle ships. It will spend millions in drilling, equipping and maintaining an army to wage war against preventable disease of every kind, in place of war against our fellow men. The physician will not have lost his profession, but will become the skilled health officer. He will be engaged in preventing disease, in place of mitigating and curing it, and will receive a fixed salary from the county, State or nation, in place of fees from the individual. The State will then have less need for schools for the blind, deaf and dumb, and feeble minded children. There will be less need for insane hospitals and tuberculosis sanitoriums.

In its very essence, such a work demands co-operation, such as can only be accomplished by organization. It demands a great State medical organization, co-operating with every other civic organization. The individual doctor owes the same high duty to his society that he owes to his country or to humanity. His influence and opportunities as a member of the society are

multiplied, and greatly exceed those of the individual doctor who stands aloof. He should not be content with reading medical journals, doing research work, or gathering up information and experience for himself alone. He must recognize his obligation to the society, to his fellow physicians, and through them to a vastly enlarged field of humanity. Nor should he be content to be an unknown and unappreciated member. He should so assert himself as to become an important unit, a constructive human factor, in the present and future work of this great co-operative organization, to which he has given allegiance.

Tuberculous Peritonitis: Report of a Case.

By J. B. Cranmer, M.D., Wilmington, N. C.

Tuberculosis, in all its phases, has baffled the best efforts of the scientist and of the physician since the earliest ages. It is still a relentless enemy, and it is only within the last few decades that it has come to be recognized as an enemy still, but as one which may be fought bravely, constantly, and in many cases, successfully. It is now, and has ever been, the most universal scourge of the human race.

The disease was regarded as contagious in the olden time. While Villemin first placed the infective nature of tuberculosis on a solid experimental basis, Conheim and Salmonsens confirmed his results. It was, however, left to Koch, the great German scientist, to isolate the *tubercle bacillus*, and to demonstrate its invariable association with the disease.

Although it was at first thought to confine itself to the lungs, we now know that any organ or tissue of the body may become infected.

In this paper, one phase only of this affection will be discussed—Tuberculous Peritonitis. In the beginning of the last century, peritoneal tuberculosis was known anatomically, but it did not command the interest of clinicians until 1825, when Lewis gave it as his opinion that chronic peritonitis is usually tuberculous in character.

One may look for this disease at any period of life, although it occurs more commonly before the age of forty, most commonly between thirty and forty—18% being found in children.

It is about equal in both sexes, post-mortem data giving preponderance to the male, operative statistics to the female sex.

There is usually some association with concurrent cirrhosis of the liver, and the spleen is generally enlarged.

The focus of origin may be near or remote; in the lymph nodes, lungs, bones,

intestines, etc. Cases which start primarily in the peritoneum are rarely seen.

Clinically, there are two forms of tuberculous peritonitis, the moist or ascitic, and the dry, fibro-plastic or adhesive. In the former, the peritoneal surface is studded with minute tubercular nodules, which may be localized or generally disseminated. Transudation of serum is a feature of this form, and the quantity of liquid is generally proportionate to the area involved. Sometimes, the transudate becomes encysted in one or more separate cavities. In the fibro-plastic form, there is little or no serous effusion, but there is an exudate, in the presence of which the mesentery, omentum and intestines become agglutinated. An ulcerated form has also been described, but this is nothing more than a cheesy degeneration of the tubercular nodules.

The symptoms of tuberculous peritonitis in the early stages are not well marked, and the history of the case usually has an important bearing upon the diagnosis. It is not, as a rule, a painful disease. There is the disturbance of nutrition, characteristic of tuberculosis, in other organs. Usually, the first symptom is a collection of fluid in the pelvis and lower portion of the abdominal cavity. In the dry varieties, the agglutination of the viscera may be recognized by careful palpation.

The treatment is both medical and surgical. Sir Spencer Wells, in 1862, first recognized the value of simple irrigation in these cases, and while, at present, we find it impossible to explain the benefit which so often and so rapidly follows, the measure is universally conceded to be the one offering the most hope.

Surgical interference, therefore, should follow the diagnosis as soon as is practicable, for without it peritoneal tuberculosis in most cases is as certainly fatal as is the meningeal form.

With this statement of a few facts concerning a disease which is so well known to us all that there is no necessity for detail I wish to report a case which has, recently, been under my care, and which up to the present time is making satisfactory progress on the road to recovery.

Report of Case.

PART 1.

In January, 1910, a married woman of 36, with a good family history except as hereafter stated, consulted me for an abnormal condition of a pregnancy, at that time five months advanced. Since the third month there had been irregular hemorrhages from the uterus.

Previous to her marriage in July, 1909, her health had been good.

A few months before she was married, the patient had nursed a sister, who died of pulmonary tuberculosis.

In the fall of 1909, after her marriage in the summer, a slight cough was noticed, but it was unaccompanied by constitutional symptoms, and soon disappeared.

The cough, however, was regarded by her physician as suspicious, and she was given treatment for incipient pulmonary tuberculosis. This was in November and December, 1909. When she came to me in January, 1910, repeated and careful examinations invariably found the lungs in perfectly normal condition.

After coming under my care the hemorrhages, above mentioned, continued intermittently, and in her sixth month, February, 1910, a profuse hemorrhage from the uterus occurred, and examination revealed "placenta previa." A version was done at once, the hemorrhage controlled and patient was safely delivered. Except for a chill, with fever, on second day, which disappeared on third day and did not return, her recovery was uneventful, and in April, 1910, patient moved to the hill country, apparently a well woman.

PART 2.

In August, 1911, patient came to me again for treatment. Her trouble this time was irregular menstruation, painful micturition, pelvic pain, tenderness in lower abdomen, accompanied by loss of appetite and general "malaise."

I found a lacerated cervix, a sub-involuted uterus, which together with a mild anaemia, seemed to me to account for her condition.

The womb was curetted, and the cervix repaired. After two weeks in the hospital, my patient was sent to her home, with instructions to keep her general health built up with a good iron tonic.

PART 3.

September and October found her condition unimproved. She began to have chilly sensations, fever, night-sweats, abdominal distention and distress, with loss of appetite. November 9th, 1911, she had a hard chill with high fever, 105 degrees. This condition continued until November 14, when she was brought back to me (on a midnight train), and taken at once to the hospital.

The temperature was then 102 degrees, pulse 100 and respiration 34. Examination of lungs and heart showed nothing abnormal. Abdomen was symmetrically distended, and generally tender. She was having frequent and severe attacks of abdominal pain. There were areas of tympany, and areas of dullness, over the whole

abdomen. The urine was normal, blood showed hemoglobin 80, but was otherwise normal. Both bimanual and rectal examinations were negative. Menstruation still irregular. This state of affairs continued, and patient resisted all medical treatment. Pain in abdomen became more acute each day, and distention increased rapidly.

On November 22 an exploratory incision was made for purpose of diagnosis, and no words can fitly describe the condition of the abdominal cavity. Everything was matted together and studded with tubercles. There were countless walled-off sacs of sero-purulent fluid. In the pelvis was an abundance of pus.

The wound was closed except for large cigarette drain in lower angle placed deeply in the pelvis.

A grave prognosis was given, but on the third day after the incision, and after thorough purgation, patient's temperature dropped to normal; the intense abdominal tenderness, and distention disappeared, and from then on there was steady improvement.

At the end of six weeks the wound was closed almost entirely; patient was both picking up and pinking up, and on January 1st, 1912, was sent to the bracing air of a higher altitude to complete a recovery which will be nothing short of the miraculous.

From this history, I draw these conclusions:

First, that the diagnosis of incipient tuberculosis was correct; that this was thrown off, and the peritoneal infection was a metastasis of the original lesion in the lungs.

Second, that Placenta Previa in Part 1, helped to stir things up.

Third, that curettage and tracheleoraphy (Part 2), added more fuel to the smouldering fire, until the disease which had so long been latent burst forth in all its fury.

Wilmington, N. C., June 9th, 1912.

I have deferred the publication of this paper that I may report condition of patient six months after exploratory operation. She has gained forty pounds in weight and has made a corresponding increase in strength. There is a small sinus at lower angle of the abdominal incision, which is granulating slowly but satisfactorily. I feel sure that it will only be a matter of a few weeks before she will be entirely well.

Annual Oration Presented to the North Carolina Medical Society.

By Dr. John Hill Tucker, Charlotte, N. C.

Several weeks ago when the realization of the fact dawned upon me that the time

was near when I should have, as their annual orator, the conspicuous honor of addressing the North Carolina Medical Society, I was filled with misgivings and fears of my unpreparedness for such a task. However, I could have had no greater awakening of spirit and imagination than I found on reaching this city two days ago. In fact I am made to wonder if Charlotte is the Queen City of the State.

Your lovely city nestled in the mountains with its sublimely beautiful environments is as enchanting and restful as the heart could desire or the mind long for.

Tonight as I look upon this splendid gathering of noble men and lovely women and ask the question, What is the object of these annual assemblages? the answer comes back, For the advancement of the science of medicine.

I am thrilled beyond expression, frankly so nearly beyond expression. I fear I cannot even, under such inspiration, rise to the level of my desire to speak worthily on the subject I have selected for your consideration. Realizing that I have the honor of addressing a great and truly representative body of that learned profession whose career began in the twilight of fable, long before authentic history had lifted the curtain of time—a profession struggling ever onward and upward until today its influence and power for good irradiates the earth.

What shall my subject be? I have considered and discarded many fascinating topics, some of them no doubt have suggested themselves to your minds, and instead I have chosen one, at the risk of being censured immodest, which comprehends them all.

The simple truth will be sufficient to emphasize the fact that our present state of civilization offers no more useful, unselfish nor heroic figure than "The Doctor," and it is to be a brief study of the doctor that I now invite your attention. Who is the doctor? Are there doctors who are only doctors in name? What is expected of the doctor? What has the doctor done to bring our civilization to its present state of advancement?

It would be unbecoming on this occasion to resort to an invidious comparison of the professions, for each in its own way has added much towards the completion of man's remarkable conquest of the earth, the air and all that therein is. Indeed it would be interesting to follow Herbert Spencer into a review of "the evolution of the profession," but time forbids such a digression from the immediate subject.

It was the great Aristotle who said, "Whoever sees things grow from the origin will appreciate their nature and beauty," there-

fore it would seem necessary for a full appreciation of what the medical profession was, what it is and what it always will be, to have a working knowledge of her past history. What would you think of a lawyer who knew nothing of Justinian or of the glorious past record of his legal brethren, who century by century have taught mankind to know and respect the majesty of the law?

Often the Temple of Justice seems to medical men to be diverted to the protection of quacks and charlatans rather than the needs of the sick. Although pitying the wisdom of such law makers, we, as physicians, are found first among men to obey the decree of the court.

Of the six learned professions, the minister, the military man, the lawyer, the teacher, the journalist and the doctor, standing as the six pillars of our modern civilization, what a luminous volume in this record of human achievements would be that entitled; "Medical Achievements."

Emerging from the mists of fable, the doctor began his career in the land of Pharaoh more than forty centuries ago. Battling with ignorance and superstition in those days with the same determination that we find him today.

He advanced somewhat in Greece when a skilled Priesthood taught and practiced medicine. We follow the profession through the days of Aesculapius and Hygieia (presumably the first female doctor) to Hippocrates, the great teacher of medicine, barring the Christian ministry because of its divine origin.

Can there be found in any other profession such a rich legacy of noble unselfish love as that handed down through the centuries in the oath of Hippocrates? It should be in this day, as then, the confession of faith of all true physicians.

Think of our ancient brethren centuries ago subscribing to such sentiments: "To regard him who teaches this art equally with my parents, to share my substance and if he be in need to relieve his necessities, and to teach his children the art if they wish to learn it, without fee or stipulation.

With purity and holiness will I watch closely my life and art. Into whatever house I shall enter, I will go to the sick, abstaining from every voluntary act of injustice and corruption and lasciviousness with women or men—free or slave. While I keep this, my oath, inviolate and unbroken, may it be granted to me to enjoy life and my art, forever honored of all men, but should I by transgression violate it, be mine the reverser"

Well may we be proud of our fathers in the faith, for loftier sentiments never fel-

low from human lips. From Hippocrates to Celcus, "The Cicero of Medicine," to Claudius Galen, who was regarded by the world infallible for more than twelve centuries.

Time warns us not to go deeply into this fascinating and almost sacred history of our ancient brethren, yet is it not true that some there be who assume the title of doctor and pursue it with as little appreciation of its purpose and grandeur and with as little dignity and recognition of its import as if they were embarking upon some questionable business enterprise born of this intensely commercial generation. So recent seem many of today's methods used in medicine and surgery, we are apt to lose sight of the fact that the profession is an ancient institution and to passed and passing generations we owe a service and gratitude, which only knowledge of and reverence for the past can ever hope to pay.

From Greece, by way of Alexandria on to Rome, was carried by faithful hands the torch of medicine.

With the fall of Imperial Rome those true disciples of science, the Arabians, kept burning the lamp of rational medicine. In the dark ages medicine passed through the night of despair, only to have the light of truth more clearly revealed in the early days of our present school of medicine.

If indeed it was possible to trace our knowledge of the origin of medicine only to the 16th century, there would be a just and right pride in the nobility of the men who have made modern medicine what it is. Not a nobility of pomp and show and meaningless pageants, but rather a human record of lives of purity of purpose and unselfish service to others, which challenges and receives the admiration of all men. I shall not weary you tonight with the impossible task of even briefly recalling to your minds the immortal names of those men who have done so much for all the world, and particularly medical men.

It is unjust, if not unkind, to the memory of the dead to boast of the marvelous achievements of modern medicine. The men who have given to the world their lives, their labors and their success in medicine, were not in the past, as they are not today, vain boasters, seeking the applause of men; but rather modest workers in the cause of humanity "Preferring perfects in their works before riches and a clean conscience before earthly honors."

To substantiate such an assertion, look this world over from sea to sea, from land to land, and there will loom up before your wandering gaze a thousand monuments to military men to one monument to honor the earthly memory of the worlds real bene-

factors; may I ask which was the greater boon to mankind, the sea of mingled blood and tears which drenched all Europe as a natural result of the Napoleonic wars, or the sleep that steals over agonized bodies and the pains that are soothed by Simpson's discovery of chloroform?

It would be an unpardonable shock and offence to our present notions of education, if the young minds of our land were not told in song and story of those vandals of blood and iron—Bismark and Napoleon. How seldom are they ever told of the lives and works of Rudolph Virchow and Louis Pasteur. The influence for good or bad wielded by Bismark and Napoleon extended perhaps over a continent, where the works of Virchow and Pasteur have helped all the world.

The science of medicine is not bound by creeds or continents; it is international, its aim is man and its beneficent influence extends wherever he is found.

It was the great Virchow who said: "The physicians are the natural attorneys of the poor." And our own great Jacobi warns the graduate doctor who is entering a hospital for additional study and knowledge, to remember he is entering a temple at whose door he will leave behind him selfish motives. He will give the same time and attention to the poor that he bestows on those outside; when he looks for knowledge he will do so without making the patient recognize it is a means to an end. He never forgets that the poor in a hospital, cut off from the world, has no one to rely upon but his doctor, and his soul goes out to those who suffer most. Many of those who greet us with hungry looks are dying."

A few days ago in my home city of Charlotte, I heard an eminent scholar and jurist casually remark: "What a lesson to me was the Titanic's fate; how much can and will be learned from that fearful tragedy of the High Seas." On that somber occasion, when all around was chaos and ruin, and for a moment the crew seemed confused, there was condensed in a single sentence more than a thousand years of English history, when down through the cold air of that star lit night, borne on the wings of the megaphone, came this command from the bridge of the ill-fated vessel, which in an hour later would start with her Captain and sixteen hundred souls on the last two miles of her journey to the bottom of a Northern Sea: "Men be British," "Men be British." My, what a fervent reminder of Britannia's rule of the sea, more than a thousand years of the gallantry and heroism of old England's sailors was called to each true British heart, and a midnight grave in icy waters was preferred to dishonor.

My friends, this all too brief and inaccurate record of our past benefactors in medicine should bear to our minds tonight and forever, what a glorious record the profession we represent in this State today has always maintained in the past. When we hear our standard of rules and etiquette ridiculed by others, maybe our best friends, we can be assured no patient was ever harmed by the attendant or consultant behaving like they are or should be gentlemen. The lay mind cannot always understand things medical, and it is depressing at times to hear the criticism of those who should feel differently about them, our patients. I sometimes feel if only a small part of the avowed sympathy of certain doctors for their prospective patients was given to their struggling brother physicians all parties in question would be better off and happier; although these and like ills we can bear if we will only stop when thus annoyed and recall what is our heritage from the past and who we are today.

It is said at the most critical moment in Washington's administrations he was slandered and bitterly assailed by his political opponents, and it was at that hour the immortal Washington said to an intimate friend: "The point is not what others think of Washington, but what Washington thinks of himself." Therefore, let us keep our own professional robes ethically clean and be able at all times to acquit ourselves after a searching trial at the bar of our own conscience.

Now this disjointed discussion of "The Doctor," in which you have so patiently borne with me, will miss its real mark if in concluding this claim of professional respectability, and the boundless mercy and good, medicine, through medical men, has wrought in the State, the nation, and the world, there is not offered a just plea for a universally high standard of education, morally, mentally and physically, of the men who are to bear the great responsibilities assumed with the title of "doctor." Much is required of the medical man of today, and more will be required of him tomorrow.

In our great, strong and democratic America, where men are grown vigorous and free, medicine and medical ideals should reach their highest state of development, where there are or should be no artificial upper classes nor distinction made among men, save that personal nobility created by early training, honest toil, and integrity in all things, whether dealing with the individual or the State. We are prone to judge a man by standards of money, not character, a physician by external appearance, style, social prominence, rather than

his real interest in and knowledge for medicine. 'Tis true of the things of this world, that perversion of the best always makes the worst, be it in religion, medicine or business.

There is nothing on earth more of Heaven than to see the loving trust and confidence existing between friends, nothing more vile and debased than to witness that trust and confidence betrayed for a few paltry dollars. There is no nobler profession than that whose true purpose is to lessen disease and relieve pain, none more perverted when human diseases and sorrows are converted into speculative commodities and manipulated according to the credulity of the afflicted for selfish gain.

That the ancients tried to make medicine a science or art and failed, and we of today are trying to make it a trade or business and are succeeding, is not true and never will be true. The argument of the hardship to poor young men of securing a college degree before entering upon the study of medicine is flimsy and will not bear the slightest scrutiny, for if he has not the time, the courage nor the ability to reach the hall of medicine through the right channel he certainly has not the proper stuff to make a doctor. Can you in fancy picture a more forlorn sight than a shabbily prepared, ignorant man, be he young or old, leaving a commercial medical school with a diploma? 'Tis too often the beginning of a life of deception, sorrow, disappointment and perhaps dishonor before the end. Too often the blame of such a melancholy medical career is not justly divided between the man and the school he goes out into the world to represent. It is true that good and great physicians start life with poor opportunities from indifferent medical schools, but in every such case we will find upon investigation the man in question is endowed with natural gifts and studious habits which will win anywhere in spite of poor opportunities and many obstacles.

The contrary to the above proposition is equally true—that the best medical schools with the highest requirements for entrance at times award diplomas to base and dangerous men in medicine. Fortunately or unfortunately, as one may view it, the first instance of a good man from a bad school of low standards is a living, breathing dividend, paying asset of untold face value to his school; whereas the bad man from the good school of unexcelled opportunities is but a bad account, and transferred to the other side of the ledger, charged to the account of caution and experience, and goes to show that two thousand years of the Christian dispensation is not long enough to separate the few bad men from the many

good and great men and women in the world.

The time is not quite ripe to tear down our prison walls and convert them into play grounds for little children; but now is the time to help in every way possible those who are leading in the cause of high and higher requirements for medical education. Now is the record making time to teach our people there is nothing cheap about good medicine and surgery, and they are a hallowed union of the two integral parts of one great profession, and should never be divorced even in the equivalent of fees, for when medicine and surgery are separated and an attempt made to commercialize one or the other, they both are cheapened and the result is unchristianlike and not lasting. The shrewdest crook in all the world cannot long thrive on high prices and cheap stock, nor can the prince of merchants long endure with valuable and necessary articles sold below cost. While he is living he may be called a philanthropist, but that meagre praise so long awarded a patient profession does not carry on the science of medicine nor supply the necessities of life.

High and rigid requirements of education and hospital training among doctors is of vital importance to the individual and the nation. When medical education is made cheap and a medical diploma easy to get the profession will be filled with quacks. Many of these quacks are men of wonderful personalities, and the best families may be won to believe in them and their marvelous cures, for kind and pleasant attentions can hide many an ignorant blunder in medicine and surgery.

Oliver Goldsmith wrote a page satirizing the quack, which in its logic and wit exhausts the subject. Let us read a few lines of it:

"The quack recognizes no difficulties like the professors of other sciences. He delights in the most desperate cases. He is gifted with the power of curing all ills. When I think of the quack these words always come to my mind, of all thieves fools are the worst. They rob you of time and temper."

There is still another ill to which the medical profession is subjected, and against which the doctor has to battle all his life,—it is the miserable, cruel, unreasonable and unprofessional spirit of jealousy and envy. I do not refer to that commendable spirit of being jealous of one's rights, for it is a healthy professional sign when medical men are jealous of rude and ignorant intrusion upon that which is their own; but rather do I refer to that envious feeling which cherishes ill towards another because of his superior training, possessions, skill or the

like. It is this envious spirit which creeps through the profession like some poisonous plant clings to the body of the majestic oak, marring its beauty, and finally distilling a lurking death to the tree that has sheltered it from sun and storm.

I say it with regret, but I think you will agree with me, when I say that this spirit of envy and jealousy prevails to a greater extent in our profession than in others.

What is the remedy? What power will hew down this upas? The answer is easy. A constant observance of the golden rule and education of doctors. Nine-tenths of all the envy and jealousy in the medical profession is ignorance—selfishness. Truly has it been said, "Ignorance is the rust of the soul."

This is not the time nor the place to say how high the standard of educational requirements should be for entrance into medical colleges; but I am sure we, as medical representatives of this great commonwealth of North Carolina with more than two millions of as uncontaminated an American citizenship as can be found on the continent, will agree that our State is entitled to at least one medical school, and the requirements for entrance to that as high as are consistent with our ideals of medicine, remembering it is not always the body, but the man who calls out to the physician for help as they travel side by side along the road of life.

In words from the sweet poem of James Fisher:

"Let me live in my house by the side of the road
Where the race of men go by—
They are good, they are bad, they are weak, they
are strong,
Wise, foolish—so am I—
Then why should I sit in the scorner's seat
Or hurl the cynic's ban?
Let me live in my house by the side of the road
And be a friend to man."

We have neglected a large class of our best patients and allowed them to drift into the hands of every manner of fakir under the sun because of failure in the education and training of medical men along the lines of suggestive therapeutics.

For suggestion and advice to the sick are only made effective by a high standard of culture and training of the men who are to be our future physicians.

When a community is blessed with a medical fraternity of courage, education and ability, you will find as a rule a most desirable class of patients. More specifically speaking, when you find a family who has a physician who in addition to natural gifts has education and is a student of human nature, you infrequently hear of members of that family consulting and singing the praises of Christian Scientists,

or running from one specialist to another without results, save perhaps to embarrass financially the anxious ones who seek to give their loved ones relief. No, my friends, where medical standards are high, and medical men well trained, there is no excuse for the gullability of the public. We will safely rely on the sound judgment of our patients to differentiate between the sham and the real. Between the man who charges a just fee, though necessarily a large one for valuable services rendered, and the unprincipled extortioner who by glittering instruments and mysterious surroundings robs you of your money, and worse still, precious time which may be your last opportunity of ever getting well.

Treatment of Rheumatism with Rheumatism Phylacogen.*

By Edward B. Richey, M.D., Adjunct Professor
Chair of Neurology and Electro-Therapeutics,
Medical Department University of Louisville;
on Visiting Staff City Hospital;
Member Kentucky State Medical
Association; Member Jefferson
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Member Louisville
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Louisville, Ky.

That which physicians and patients alike are looking for in the application of the science of medicine to the relief from disease is results, and such results as satisfy the patient to such an extent that they continue to tell their friends that the treatment was a blessing and a relief to them after a period of four months, is just the kind of results we are all looking for.

In the first place, I must say that I was ready, even from the very earliest introduction of Schafer's products, to try them out because I had already reached many conclusions that accorded with his before I ever heard of him or his investigations and successes.

Namely; that practically all acute and many chronic diseases are caused by the toxins of their specific bacteria, that the human body is constantly in health the host of micro-organisms that lie dormant save whereby other irritations or injury they are given access to the body parts, and either primarily or secondarily are the cause of the disease.

That even as animal life is destroyed by its own excreta or metabolic products, so is bacterial life, and that since this is true the filtrate from bacteria grown upon artificial culture media containing these metabolic products becomes the means, if introduced

*Report read at a meeting of the Jefferson County Medical Society, March, 1912.

into the blood current, of immunizing the body against that particular infection.

I further agree with Dr. Schafer in his opinion that most diseases are what they are to the human organism because there is present a mixed infection.

I believe from my use of Schafer's mixed product, which I have given thorough trial in a few cases of tuberculosis, that ridding the body of the micro-organisms of mixed infection makes tuberculosis a comparatively simple thing to treat successfully if taken early in the disease.

All these cases in which I used the mixed product were advanced cases, but in all of them the sputum became free from all bacteria except tubercle bacillus upon its administration. Other symptoms which could be attributed to the pus producing organisms cleared up and the temperature was more easily controlled.

It has no doubt been the observation of all laboratory men that in isolating any specific organisms they encounter not only multitudes of known organisms, but many unknown and unidentified.

It, therefore, stands to reason that if we make a substance which will successfully produce phylaxis or an ability upon the part of the body to resist disease, we must develop not only a phylacogen from the specific micro-organism, but also from all micro-organisms found present in the stated disease.

Developing this product with scientific care, as I have good reason to believe Parke, Davis & Co., do develop it; because of the care and exceeding precaution they use before placing a product upon the market in all instances, we can hope for results.

In accord with my beginning statement that what both physicians and patients want is results, I am reporting the following case which I have now had under observation since February 1st, 1912, until this writing, May 14th, 1912:

(Private Patient). Mrs. H., age 65, white, female, married, housewife.

Diagnosis: Chronic articular rheumatism.

History: Mother of eleven children, seven of whom are living and in good health. Husband, age 70, in good health and very active. Father died age 64, cancer of stomach. Mother died age 30, childbirth. One brother living in good health, three brothers died in infancy. No sisters. Usual diseases of childhood, no history of rheumatism in family.

Subjective: Thirteen years ago feet and ankles pained when first getting up in the morning. Went to "Springs" that summer, but received no benefit. One year later, knees, hands, fingers, and elbows

became involved, necessitating the use of crutches at times. Eight years ago had to resort to crutches all the time and then had great difficulty in getting about and suffered great pain, unable to turn in bed without assistance.

Objective: Slight seal-finn deformity of both hands, both knees, and both elbows, slightly ankylosed, pain in all these joints, also in hips and shoulders, cannot turn in bed without assistance. Has been unable to walk, even with assistance of crutches, for past three months. Suffers with insomnia on account of pain, appetite poor, vertigo, practically bedridden. Is very fat and heavy.

Treatment and Results: Spent one winter in the South, has taken all the rheumatic remedies, osteopathy, hot baths, constitutional and local measures, with only very temporary relief and a return of former pains much exaggerated.

One case does not prove conclusively the efficiency of any remedy whether administered within the blood current, (the method par excellence in my way of thinking) or given per mouth. But to me the results in this case have been so very satisfactory, relieving all pain permanently, giving the patient the use of her limbs in walking whereas she was bedfast, giving her health whereas she was diseased and suffered the stigma of disease, relieving to a marked degree the stiffness and enlargement of joints, getting rid of all swelling, establishing a normal action of all excretory and secretory organs and making the patient comfortable and happy. I make these observations after having kept the patient under observation for the past four months. I now have other cases in process of treatment in which so far phylacogen is proving equally efficient.

I do believe, however, that it is absolutely necessary for the physician using rheumatism phylacogen, or any other phylacogen, to be very sure of his diagnosis and to be very sure that his patient has no organic heart lesions, no nephritis and no sclerotic liver before undertaking this treatment for the reason that the administration of phylacogen directly into the blood current produces a marked reaction and taxes these organs to their utmost and I fear without their being normal there might in some cases of low resistive power be fatal issue. This, however, is not a serious objection to phylacogen, inasmuch as the same can be said of less efficient remedies where given even by mouth or other methods of administration long in use.

Under all circumstances it is the duty of the examining physician to either make a blood examination or have it done by a

		Temp.	Pulse.	
2-8-'12.	4:00 p. m.	98.0	90.	
	4:00 p. m.	2 Cc. R. V. sc.	Rx. 090989.	
	8:00 p. m.	98.6	90.	
2-9-'12.	8:00 a. m.	98.6	84.	
	4:00 p. m.	5 Cc. R. V. sc.	Rx 090989.	
	4:00 p. m.	98.6	96.	Ate hearty dinner.
2-10-'12.	10:00 p. m.	98.2	96.	Kidneys very active.
	9:00 a. m.	98.	97.	
	4:00 p. m.	7 Cc. R. V. sc.	Rx. 090989.	
2-11-'12.	7:00 p. m.	97.4	96.	Ate light dinner.
	10:00 p. m.	98.6	96.	
	9:00 a. m.	98.8	96.	Moderate breakfast.
2-12-'12.	7:00 p. m.	98.8	96.	Good appetite, no vaccine.
	8:00 a. m.	97.4	90.	Light breakfast.
	10:34 a. m.	2 Cc. R. V. iv.	Rx. 090989.	
	11:00 a. m.	Chill lasting 55	minutes, nauseated.	
	1:00 p. m.	Vomited, hard	chill, occasional blindness, very thirsty,	
		drinking much	water.	
	3:00 p. m.	103.	120.	Headache.
	5:00 p. m.	102.	120.	
	9:00 p. m.	100.	102.	Skin moist, chilly sensation.
2-13-'12.	8:00 a. m.	97.4	84.	Slept well, turned in bed without assist-
				ance, good breakfast.
	11:05 a. m.	4 Cc. R. V. iv.	Rx. 090989.	
	12:50 p. m.	Chill lasting 20	minutes, severe headache.	
	2:00 p. m.	102.	126.	Feet warm, headache less.
	3:00 p. m.	102.4.	120.	
	5:00 p. m.	101.8.	120.	Irregular. Suffers every way.
	8:00 p. m.	100.	99.	Feeble. Drowsy at times.
	8:00 a. m.	97.6.	81.	Light breakfast, vertigo.
2-14-'12.	11:22 a. m.	5.5 Cc. R. V. iv.	Rx. 090989.	
	11:45 a. m.	Chill lasting one	hour, thirsty, no headache, chill not so	
		severe as that	of yesterday.	
	2:00 p. m.	101.	102.	Still thirsty, kidneys act.
	7:00 p. m.	99.	100.	Light dinner.
	8:00 a. m.	97.8.	84.	Tea, toast and egg.
2-15-'12.	11:15 a. m.	8 Cc. R. V. iv.	Rx. 090989.	
	11:45 a. m.	Chill lasting 45	minutes. Thirsty.	
	1:30 p. m.	101.2.	108.	Sleeping off and on.
	5:00 p. m.	99.2.	90.	
	7:00 p. m.	98.6.	90.	Tea and toast, vertigo.
	8:00 a. m.	97.6.	84.	Light breakfast.
2-16-'12.	12:28 p. m.	18 Cc. R. V. iv.	Rx. 090989.	
	12:40 p. m.	Chill lasting 35	minutes.	
	3:00 p. m.	101.2.	102.	Cup tea and grape fruit.
	7:00 p. m.	98.2.	98.	
	8:00 a. m.	97.6.	78.	Good breakfast, feels fine.
	11:20 a. m.	10 Cc. R. V. iv.	Rx. 090989.	
2-17-'12.	11:30 a. m.	Chill lasting 45	minutes.	
	1:00 p. m.	99.	80.	
	7:00 p. m.	Light dinner,	slept some in afternoon.	
2-18-'12.	8:00 p. m.	99.4.	90.	
	8:00 a. m.	97.8.	90.	Slept fine, feels good.
	7:00 p. m.	98.2.	90.	Hearty dinner, walked on crutches and sat
				up nearly all day, no vaccine.

competent specialist. Carefully analyze the urine and feces and if there are any other abnormal excretions they also should be examined microscopically.

An Operative Plan for the Correction of Club Foot.*

By Joseph Graham, M.D., Durham, N. C.

In the normal foot every bone has a definite position and all the bones have a definite anatomical and mechanical relationship. These relationships are of the greatest importance, for upon them depends the balance of the skeleton of the foot and the freedom of motion of the various joints. In club foot the bones are deformed, the anatomical relationships distorted and the mechanical balance thrown out of working order. Club foot cannot be corrected unless the shape of the deformed bones is corrected, and their anatomical and mechanical relationship be restored so as to bear weight naturally and so that the joints can move in a natural way.

The plan of correction proposed is to correct the deformity of each and every bone of the foot by a series of subperiosteal osteotomies and restore the natural anatomical and mechanical relationships.

These osteotomies are very simple operations. The difficulty is the mechanical diagnosis. Study of the bone deformities by the X ray is of very little value.

To properly plan and perform the necessary operations, we must be able to see and feel the foot when walking and to see and feel just how the weight is borne and how the motion of the joints is produced.

The plan of operative correction must be determined by the surgeon's mechanical skill. It is impossible to give in detail definite direction as to what operative procedures will correct the deformity in any case. The surgeon must determine what combination of operations will correct all the bone deformity. No matter what work is done for the muscular mechanism the foot will not remain straight unless the bone deformities are corrected so that the skeleton of the foot is naturally balanced.

The object of our correction is to so balance the skeleton of the foot that the muscular mechanism can be balanced and no braces or support need be worn.

Usually a series of two, three, four or more operations are required to fully correct all the deformity.

The plan is always to correct the varus first and the equinus later. In some cases it is only necessary to divide the metatarsals, excise a wedge from the cuneiform, divide the planta fascia and lengthen the tendo achilles.

In others it is necessary to divide the metatarsals, excise wedges from the cunei-

form, cuboid, astagalus or calcis, tibia and fibula and also divide the planta fascia, cut the great club foot ligament and lengthen the tendo achilles. In the paralytic cases we also have to transfer tendons such as the extensor longus hallucis and the peroneal.

Each case must be treated according to the individual deformity. The object is to restore as accurately as possible the normal shape of each deformed bone. As various as are the shapes of the deformed bones, so various must be the size and shape of the wedges removed.

There is room for much judgment in determining where bone shall be removed and the size and shape of the piece to be excised.

Especial attention must be given the direction of the metatarsal angle, the size and direction of the cuboid and cuneiformes, the relationships of the scaphoids and astagalus. The position of the astagalus and its relationship is of the greatest importance.

In the performance of these operations we should always use curved skin incision and great care should be taken to place the skin incision in either bone or tendon sheath.

Adhesions between the skin incision and the incision in bone or tendon will seriously interfere with motion. We never divide a tendon but always splice and suture it so that we can exactly determine what effect the lengthening or shortening will produce on the motion of the joint.

The osteotomies are performed by chisel and mallet with the foot resting on a sand pad. The effect of each bone division is tested by repeated palpation and manipulation. In this way we determine the necessary steps for full correction of the deformity.

Of course, it is needless to emphasize the importance of asepsis in the performance of these osteotomies. After the osteotomies are completed, the periosteum sutured, and the skin incision closed, a light gauze dressing is applied. Then the foot is molded into a natural shape, and a plaster dressing applied from the toes to the knee to retain the corrected foot in a natural position. We never put the foot up in an over-corrected position. It is the natural position that we want to secure. During the application of the plaster dressing great care is taken to hold the foot in a natural position so that all surfaces and arches are in a natural position.

After correction by subperiosteal osteotomies, if the work is properly planned the foot will remain corrected, in a natural position.

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The plaster casts are removed in three weeks and passive motion and massage instituted.

Frequently considerable œdema follows these operations on the metatarsals, but it always disappears under a few weeks massage.

As soon as bony union has occurred in the divided bones the patient can begin exercising the feet and soon begins walking. If the work has been correct there will be no further need for plaster casts or braces.

We always take measurements of the feet and have made a proper substantial shoe.

Frequently some little secondary operations are necessary to fully correct some little detail of bone deformity or impairment of motion. As the operative plan is to correct the bone deformity and restore the balance of the skeleton the same plan of procedure is used in congenital talipes, equino, varus, and in club foot, with marked bone deformity, following infantile paralysis.

In these cases of paralysis it may be necessary to transfer the tendons but the correction of the bone deformity must first be accomplished. It is useless to transfer tendons and expect normal motion where there is marked bone deformity blocking the motion of the joint. To restore these paralytic feet we must first correct all bone deformity, restore the normal anatomical and mechanical relationships, balance the skeleton of the foot so that it will bear weight naturally and that the joints can move naturally. Then the muscular system can be considered and the necessary work to balance the muscular system can be done. It is useless to attempt to balance the muscles until after the skeleton of the foot is balanced.

As our Operative Plan is to correct the bone deformity and restore the balance of the skeleton of the foot, we advise that it be used only in those cases in which it is indicated, that is in cases of club foot with marked bone deformity.

In the cases of congenital club foot, seen early, and in cases of paralytic club foot in which the bone deformity is slight, we would not advise subperiosteal osteotomy. These cases can be corrected by manipulation, by manipulation under anæsthetic, followed by the application of retentive apparatus, and the use of suitable shoes and braces.

If the bone deformity is slight there is no need to operate upon the bones, but our object will be to balance the muscular mechanism by a series of tenotomies, shortening or lengthening of the tendons, division

of contracted fascia and ligaments, and in the paralytic cases transference of tendons.

In the untreated cases of talipes equinovarus, and in the old club foot, with marked bone deformity, following spinal paralysis we cannot correct the deformed foot unless we correct the deformity of each bone and restore the natural mechanical and anatomical relationship. In these cases the plan of operative correction proposed is the only means that will accomplish our object.

Of course it is impossible to make perfect feet from these deformities, but it is really wonderful how much can be accomplished by these simple operations.

Our first cases were not well planned and the operations were repeated several times.

While our experience in the use of this operative plan is still very limited, as we are now more familiar with the mechanical and anatomical relationships of the bones and joints of the foot, we expect better results in future cases.

Our work on club foot has been very satisfactory. It is a real pleasure to correct these deformities so that the sufferers can discard crutches and braces and learn to walk in a natural way.

What the Rockefeller Sanitary Commission Can Do to Build Up County Health Work.*

By Jno. A. Ferrell, M.D., Raleigh, N. C., Assistant Secretary to State Board of Health for Hookworm Disease.

Gentlemen:—

What the Rockefeller Sanitary Commission can do to build up county health work is the subject assigned me by your program committee. The Commission is vested with authority to use the donation of Mr. Rockefeller not to fight tuberculosis or typhoid fever, or to subsidize the salary of any health official doing general work; but the express purpose, as the name of the Commission implies, is "the eradication of hookworm disease." In so far as the eradication of hookworm disease in a county will build up county health work the Commission is free to act.

The Commission has been true to its trust, has devoted itself to fighting hookworm disease, for which purpose it was created, and has freely expressed itself, as has also Mr. Rockefeller, as highly gratified with the definite results thus far obtained, results of such magnitude that no other health work in the South or nation—able authorities say—is comparable to it.

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Yet John D. Rockefeller in restricting his gift to one disease and limiting the Commission he created to this one disease, was not forgetful of other diseases nor the strengthening of State and county health work. In a long and profitable experience with petroleum he had learned that the by-products of his industry rival in importance the refined oil; and that this principle applied to educational work for schools, farming, sanitation, etc., all of which in a democracy are dependent on educating the people. His penetrating mind taught him and his corps of able advisers that the best, quickest and most efficient means of educating people along any line was by means of a practical demonstration.

In aiding county educational work in the South, either through the General Education Board or the Southern Education Board he spent money to secure the establishment here and there in this and other States of special tax schools as demonstrations. In these demonstration schools the people saw increased facilities, longer terms, better teachers and modern school houses replace what they regarded as all they could afford. As a result in this State there have been voted by the people, in spite of their usual aversion to increasing taxes, a special tax for schools in 1275 districts within the past twelve years. Having increased the school funds of the State in this way more than \$1,228,886.00, an amount more than one-third as large as the entire school fund of the State, he is now directing his attention to the accomplishment of other definite things in educational work, which we shall not here discuss more than to say that all his representatives are employed for their entire time.

What has he done for agriculture? Did he diffuse his assistance to all crops, or for a definite demonstration? You know the answer. Through the General Education Board he put up the money for the Boys' Corn Clubs, a crop which can be made in every county in the South. Why did he not take wheat, cotton or tobacco? One crop only was needed and corn is a necessity and grows everywhere. The result has been, as you know, that the yield has increased by leaps and bounds until now 100 bushels of corn are grown to the acre by mere boys, a feat undreamed of ten years ago.

The money for the Girls' Tomato Clubs is put up by Rockefeller. Why did he take tomatoes? Because it is a crop which grows without fail every season in every Southern State, and affords the opportunity for the single demonstration, which is sufficient. The canning of other vegetables or the fruits will be taken care of by the people as

soon as the care of one definite product is mastered. Another aid to the farmers he supports is suggested by the name: the Farm Demonstration Work. In this the farmer who desires it is instructed in the cultivation, not of the entire farm, but of a single plot, using new and effective methods. This demonstration is sufficient. The remainder of the farm does not suffer long. The results have been that since this work began the yield per acre of all the crops has been increased from two to ten fold.

Those of you familiar with the campaign of tick eradication know that its splendid success has been dependent on the demonstrations made in small areas—usually the county. Similarly \$5,000.00 spent in making a demonstration of two or three miles of good road does more to secure a bond issue of \$250,000.00 for good roads by a county than would four times the amount spent in a haphazard manner on 100 miles of road. The demonstration which is practical and gives definite measurable results in the brief time the average man is willing to wait is the key to educational work.

Having seen this principle repeatedly found true in the educational work he had supported what might be expected of Mr. Rockefeller when he concluded to lend support to health work which we all acknowledge is based on educating the people? His first notable health work was in the establishment of the Rockefeller Institute for Medical Research. What has been done there under the direction of Flexner is well known to you all. His next aid to health work was of a more practical nature so far as you health officers are concerned. He set about to select a disease which afforded the best opportunity for the eternal demonstration. Look through the list of diseases found in the State or South for example. What is available for the purpose? Diphtheria responds splendidly to modern treatment, but is epidemic and requires immediate action. A few men in a large territory like a State could not meet the emergency of an epidemic, and once the epidemic was over months might elapse before they could work again. Malaria is preventable and curable and would afford a splendid disease for demonstration purposes, but it is prevalent only at certain seasons of the year and in certain sections. Unlike malaria typhoid fever has no specific remedy and is not adapted to demonstrative purposes. It may be prevented but the people often will not credit statements that it has been prevented. Tuberculosis is prevalent and so chronic that for twelve months of the year it may be found in every county in the State. Hence it would afford an excellent example for demonstrating

health work if immediate and striking results could be obtained in the short time the restless American is willing to watch for them.

Hookworm disease has none of these disadvantages. It is the most prevalent disease we have and is found in every county of the State. Its chronic nature renders it available for demonstrative purposes every day in the year in every community of the State. It is the only one of the common diseases in the State which has a causative agent discernable to the naked eye. It is both preventable and curable by methods, the simplicity of which appeals to every one. The results following treatment are so prompt and emphatic that they have been aptly compared with the miracles of the New Testament.

In 100 counties of the State physicians have already seen the happy response to treatment for hookworm disease. They were, however, hedged in by medical ethics so that their experience was not heralded to the community at large. Without these restrictions they could have increased the interest of the people generally in preventive medicine. In this particular a whole time health officer would be free from such considerations. He would not be regarded as courting private practice when he went about teaching the people.

Since last July five whole time health officers have conducted in thirty-five counties State and County Dispensaries for the free examination and treatment for hookworm disease. Forty thousand people have been treated in this way. In every nook and corner of these counties may be found walking and talking examples to enthusiastically and eternally demonstrate the wonderful transformation which can be brought about with a small sum of money. The amount of work done by each man devoting his entire time to it is demonstrated. In being paid a salary he is not seeking fees in competition to practicing physicians. He can therefore have the co-operation of the profession and not, as is often the case, its hostility. Sums of from \$200 to upwards of \$300 have been appropriated in twelve months by the Boards of County Commissioners of forty-one counties, a total of \$9,450.00. Forty-one counties have paid for an average of six weeks definite health work more money than is paid in salaries to the county superintendents of health in seventy-five of all the counties in the State. This demonstrates that county money for health work is available as soon as the tax payers are convinced by demonstration that you have something for them worth the money. Money is not scarce for those propositions which insure handsome re-

turns. Robeson county had the dispensary demonstration last July and August. It saw the results in six weeks of 2,000 people treated for hookworm disease. Now it has our Demonstrator as a whole-time health officer at a larger salary than the Commission was paying him. With the approval of the profession of the county he will continue for the greater part of the summer at the county's expense to make demonstrations by curing hookworm disease.

Sampson county had this demonstration work at the same time. Its people there saw 2300 people treated for hookworm disease. Dr. G. M. Cooper, County Superintendent of Health, has since written that "The dispensaries for treating hookworm disease did incalculable good to our county from every standpoint. To the infected children the actual treatment given has been worth many times the cost; but I believe that even greater good has been accomplished in arousing the people to a sense of the need for better sanitation and hygiene in every day matters. Not a single complaint even among the most miserly has been heard." Hear what Mr. C. D. Bradham, chairman of Craven county Board of Commissioners, writes as a representative of the feeling of county Commissioners: "I will be glad to make a trip to ——— county at my own expense and appear before their Board for the benefit which this entire section would derive from the service. We are just beginning to realize how much good it has done Craven county. No equal amount of money we have spent has meant more for the welfare of the county." Mr. Joe Brown, of Chadbourn, states that he has sold considerable lumber in his county for sanitary privies. A Goldsboro merchant said that the sale of strap hinges and screen wire for privies has been a boon to his business. Evidences that the demonstrations are educating the people come in from all sides.

These gentlemen who are to discuss this subject will, I feel sure, make clearer to you than I have been able to do the invaluable impulse county health work is receiving from having a concrete demonstration in a practical and convincing manner with disease particularly suited to the purposes of demonstration. If they have not actually seen the dispensary work there are numerous health officers present who have actually seen the work in progress and the results following it. I feel sure they, too, would be glad to give you first hand information concerning the educational value of the dispensary.

In doing this demonstrative work with a disease, the Rockefeller Sanitary Commission is doing, I believe, for State and county

health work what the corn clubs and farm demonstration work has done for agriculture, and what the general Education Board has done for school work, namely, giving definite demonstrations.

Feeble-Mindedness from the Medical Point of View.*

By Dr. Ira M. Hardy, Washington, N. C.

In considering the subject of feeble-mindedness from the medical point of view, I take it that it is better to bring to the aid of my modest efforts in this direction some of the leading medical and scientific authorities of the world upon this subject. I do not, for a moment, wish to assume the role of instructor to such a distinguished professional audience as this, but I come here simply as a post-graduate to learn and to be more learned in the ways of the mysterious mind of man. Any personal opinions which I may offer toward the elucidation of the subject, are presented at their face value, but those in support of what I may state are probably well known to many of you, but not so familiar as they ought to be even to the most intelligent part of the lay public.

It is said that when a child comes into the world, though he already has all the primary convolutions, he has only one-third of the volume of his brain; he acquires the second third before 12 months are over, and the rest between that time and the 21st year. "By far the greatest growth of the brain occurs in the first two years of life. Development of the skull goes on from birth to the seventh year. About this time the cranium has gained full size, and there is almost a pause until the commencement of puberty, when a further period of increase begins, which goes on until the completion of the bones."

According to the most advanced medical and scientific authorities, in the foetal brain are molecules and granules, amongst which appear short thread-like corpuscles, out of which are evolved oval colorless cells, and then nuclei are formed. "The cells go on to assume an angular or pyramidal form, and throw out processes and branches. The axial nerves are formed later. The development of the cells does not proceed equally throughout the brain; nerve cells may be found in the sensory-motor regions, while in other parts there is nothing seen but the primitive threads. Pyramidal layers of the cortex appear earlier than the superficial ones. Nerve cells of the cortex are among the latest of the cell elements of the nervous

system; those of the spinal cord are fully developed when the cells of the brain are beginning to appear."

Dr. W. W. Ireland, an English authority on the mental affections of children, observes that microscopists have assumed that the appearance of the medullary sheath is a proof that the nerve fibres are sufficiently formed to take on their function. "In the new-born child the main motor and sensory tracts of the spinal cord are already developed and the axis bands appear in vermiform process and the floculus of the cerebellum, but the greater portion of the axis cylinders of the cerebrum are still naked." He states that the first complete axial fibres occur in the posterior roots of the spinal column and the back. These mature nerve fibres are held to transmit impressions of touch and of heat and cold, and from the first sensations of infancy, the foundation of its personality and point of departure of the motor impulses to the muscles. "In the medulla oblongata and spinal cord, the motor tracts are developed before the sensory ones, while in the brain the sensory tracts are developed before the motor ones. After sensory fibres of touch and bodily feeling, mature nerve fibres are observed in the olfactory tract about the end of the ninth month, running to the olfactory spheres in the base of the frontal and temporal regions of the brain."

The next to be developed are said to be the optic tracts. "About the second week after birth, bundles of mature nerve fibres can be traced from the retina to the basal ganglia, the corpus geniculatum externum and the corpus quadrigemianum arteries, and thence to the visual area in the occipital lobe. In infants born before full time, the nerve fibres are not completely formed, consequently the faculty of vision is not yet in exercise. Last of all are the matured auditory tracts, as hearing is the last sense evolved in the child. Thus sensory tracts and sensory areas in the cortex are formed, while the remaining two-thirds of the brain are still in an immature state, destitute of fibres with medullary sheath." These areas comprehend the Denk-organs according to Fleshsig, who says that a month after birth the *think organs* are still immature, and even in the third show poverty in myelin and so can readily be distinguished from these other areas. "These different sensory areas developing independently of one another are not adjacent, but a month after infantile life, innumerable association fibres stretch in both longitudinal and transverse directions, meeting one another in the whole brain, motor leading from median convolutions through the corona radiata and optic thalamus. They have axis-band fibres dur-

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ing the first month of infantile life. These coming from the lower portion of the third frontal are later in development."

Dr. Vulpian studied fibres that horizontally traverse the surface of the hemispheres, and called them tangential fibres, which appear on the cortex in the fifth month of life. In the seventh month he states the tangential fibres are found in deep layers; while in layers between, the cross fibres only appear after a year. "In a child of eight, or perhaps seven, the fissures of the cortex and medullary substances are complete in number and calibre, and have taken the same arrangement as in the adult. It is during the development of the brain and nervous system before birth, and during the first year of growth, that malnutrition and perverted actions occur, which result in defective mental power."

Now, in the foregoing, I have endeavored to trace, with the assistance of the most advanced authorities, the mental structure of the child in embryo and after birth to almost the adolescent period. In this I have shown the structure and development of the brain in what may be called the normal child. Now let us turn to the consideration of the sub-normal child who should enlist our warmest sympathies, and above all, be entitled to our kindest protection and tenderest care. However, before proceeding further in the consideration of the subject in hand, it may be well to give a definition to the term "feeble-minded." The words "idiot," "imbecile," "defective," "delinquent," "degenerate," and even "dement" in the initial stage, are all included under this comprehensive term. In fact *feeble-mindedness* includes everything from low grade idiocy to actual insanity. However, in medical parlance, according to its lexicographers, it has been usually defined in a general way as *idiocy*, of which there are a number of different classifications. Some more modern authorities, however, claim that the latter term, in its collective sense, has almost vanished from scientific reports, and that *feeble-mindedness* is taking its place. Be that as it may, I shall, for the purpose of this paper, use both terms separately and collectively, and especially *feeble-mindedness* in the sense that it implies any mental deficiency short of down right insanity.

Eugenics, although a child of recent birth, has rapidly come to the fore and now is regarded as one of the advancing sciences whose study comprehends the entire character and scope of racial and individual improvement and betterment. As it relates to *feeble-mindedness* and *idiocy*, it informs us that we are in grave danger of believing that the "hereditary causes are all-sufficient

and final in the accounting for the entire group of mental defectives." Such a view, while worthy of respectful consideration, is not altogether borne out by the investigations made and being made in this direction in both Europe and America. We almost know to a positive certainty now that at least 35 per cent. of the ordinary type of feeble-mindedness is due to normal heredity, while it is said fully 65 per cent. of normal heredity obtains in low grade idiocy. It is a recognized fact in medicine that presence of "distinctive signs of disease in but 60 or 70 per cent. of all cases suffering from almost any disorder, makes the diagnosis of doubtful value, while in the field of causation of disease, even in a small group of absolutely negative findings as regards the particular cause, renders that specific cause not sufficiently determinative to speak of it as the *main* cause, much less the *sole* cause."

Fere says: "What favors the multiplication of neuropathic degeneracies is that neurotic persons of any kind have remarkable tendency to seek one another, and this pathological selection continues to swell the number." Ireland very truthfully remarks: "When one learns the anatomy of the heart, he is at no loss to understand how it acts as a pumping machine, but our knowledge of the structure and mechanism of the brain does not throw much light on its functions. Knowledge of the arteries, capillaries and veins makes the circulation of the blood clear. The structure of the eye-ball and the laws of light enable us to comprehend any change in visual apparatus. Knowledge of the anatomy of an organ takes us far into its physiology. Morphology and histology of the brain make us but little wiser as to how its structure is adapted for its completed functions. It is like a scroll which we cannot decipher. We know that it has a meaning, and that if the characters were altered or the lines transposed, the significance would be different, or there would be no significance at all."

According to Dr. Clark, the arrest of brain development is the most striking change in the feeble-minded brain, the various residual inflammatory changes of the idiot brain often outrank the defects of development. He observes: "Either development defect paves the way to sequential inflammatory changes, or *vice versa*; probably the former is the case. The various low grades of idiocy, as separated ordinarily from the higher types of the feeble-minded class, have many causations, such as inflammatory over-growth in the meningeal coverings of the brain, wasting away of the cell contents of the grey matter of the brain, hemorrhages, plugging of the blood

vessels in the brain substance, cysts, softening and hardenings of certain parts of the brain." Many idiotic children, he thinks, are simply born with mental defects, and therefore, cerebral defects upon which paralysis is later insidiously engrafted from some unknown cause. Many simple idiots are child paralytics, the child brain being very prone to develop encephalitis, which is one of the commonest causes of idiocy. He continues by stating that "many of the obscure and bizarre symptoms of idiocy, epilepsy, and palsies are to be explained by the seat, character, and extent of this peculiar form of encephalitis. The so-called paralytic brain is often seen in those showing simple idiocy or imbecility from birth. Are not the latter class entitled to be called *born paralytics* as regards all brain functions? The latter class shows that they gradually gain a paralysis of all functions at six or seven years of age, the period at which paralytics, as well as normal children, contract their mishaps most frequently."

Reproductions of malformations or deficiencies in brain or lungs are not less surprising than reproductions of trifling peculiarities in the integuments according to Ireland. "Women give birth to children who are insane before the brain could have been deranged by their own exertions. Children born from the disunion of parents conceived in antagonism can only be excessive in their tendencies or monsters in their organization. Fright to the mother or other painful emotions is often assigned as a cause of idiocy. In all ages women have believed that fright or extreme distress is dangerous to their unborn offspring, causing weakness, deformities or deafness. It is also supposed that the anxiety and distress of the mother have the effect of increasing idiots amongst illegitimate children." Any way, there is greater mortality for illegitimate children and more of imbecility. The number of male idiots everywhere is greater than the female. The development of a male child is likely to be a greater trial upon the formative powers of the mother, and when these are inefficient, a break-down in a complex organ is more likely to occur with the male than with the female infant.

According to another medical authority there are now some 15 types of idiocy classified on either distinct clinical or pathological grounds. "At autopsy the naked eye appearances of the brain are sufficient to enable us to classify the cases. In all cases of low grade idiocy there are definite and well-recognized changes in the autopsied brain fully explaining the previous mental

state. These tissue alterations are most frequently the residue of old inflammatory changes which occurred in the early life of the individual subject."

Idiocy is generally regarded by the medical profession as a defective development of the cerebrum, due to lesions which attack one or the other parts of the nervous centers. While the general causes for epilepsy appear to be the same as those for idiocy, yet epilepsy seems to be propagated more directly than other neuropathic diseases. Ireland observes, for example, that "drunkenness in the parents is a very common cause. In fact, an excess of alcohol may originate the epilepsy or bring it back after the disease seems to be cured. Epilepsy is sometimes caused by injuries to the head or by cerebral tumors. We are not bound to suppose that morbid influence is always directed on the nervous system—dyscrasia may show itself in miscarriage or still-birth." Again it is said that hereditary predisposition is in most cases insufficient alone to cause idiocy, but requires other unfavorable influences to produce it. The neurotic tendency is accomplished by various abnormalities of structure sometimes called stigmata, associated with deficiencies of the brain and nervous system.

According to an English authority on the mental diseases of children, "idiocy is mental deficiency or extreme stupidity, due to malnutrition of the nervous centres, either before birth or before the development of mentality in childhood. Imbecility denotes a less marked degree of mental incapacity, while feeble-mindedness denotes both idiots and imbeciles short of insanity. Dementia, on the other hand, begins with average intelligence, which gradually diminishes. Idiocy begins with a low amount of intelligence which gradually increases. Some demented have not lost the power of thinking, nor of concentrating attention, but abstain from mental exertion because it gives them pain. The idiot is generally soft, good natured, and confiding. The demented heavy and sullen."

Addison found in a congenital idiot the greatest quantity of phosphorus, and in the brains of two congenital idiots the least fat. Ireland says the same were also found in a case of dementia, and in one of melancholia. He observes: "The principal anomalies in the skull of an idiot are flatness of the head behind, rapid slope of the chons, an osseous rim round the foramen magnum, a symmetrical size of the cavities on each side, irregularities in the wings of the sphenoid, and differences in the size and shape of the jugular and other foramina. Some idiots are slender and have the general appearance of having been poorly finished;

but these abnormalities are not constant, and often the skull is irregular in both structure and capacity. In idiocy abnormalities in the form of encephalon, are often visible to the naked eye. The convolutions are coarse and simple, with a few secondary folds; the *orgyri* small, slender, and curling. Sometimes a few convolutions in the upper part of the frontal and parietal lobes are narrower than the rest, and alterations in amount and arrangement of the underlying white substance are observable. As a rule, the thinner the cortex, the more complicated are the gyri." Thus a diminished amount of the white matter may influence the form and quantity of the grey matter of the brain.

Again, it is stated that the confluence of the fissure is sometimes a marked feature of the idiot's brain, the occipital lobe in some cases failing to cover the cerebellum. The latter is often in size and weight larger in ratio to the cerebrum. In the idiot cerebrum it is generally lighter, though in some cases it is beyond normal weight. There are asymmetries of the base of the brain, often accompanied by irregularities of the sphenoid and occipital bone—which are more of a proof of the disordered direction of the formative powers than an explanation of mental hebetude. In some there are profound idiocy, in others, a moderate degree of mental weakness. Of prime importance is the supply of warm arterial blood to the functions of the brain. Large volume of the circulating fluid is necessary to the brain, not solely for the purposes of nutrition or repair of waste. When repair is most actively going on, as during sleep, the supply is diminished. When the circulation of the blood is lessened, even by pressure on the carotids, the mental manifestations are suspended. "Thus the functions of the brain are dependent upon certain inter-action between the blood and the solid tissues. This view is said to be confirmed by the remarkable results obtained by the administration of the thyroid juice of animals in one form of idiocy in which the thyroid gland is wanting. Other malformations revealed by dissection are abnormal distribution of the blood vessels, unusual arrangement of the muscles, lobulated forms of the kidneys."

Few microcephales are of ordinary stature, and many of them are dwarfs. It is claimed that there are instances of two, three, and even four microcephales being born one after another to the same parents, nevertheless it is said to be the rarest of all kinds of idiocy. Vogt believes microcephaly to be an instance of atavism, the appearance of a type of brain inherited from some very remote ancestral ape. Ireland

claims that the brain of the microcephalic idiot is the result of arrested development of a human brain checked in its evolutions at the simian stage. Gratiolet observes that microcephaly always precedes birth. It is thought probably that this state depends upon some cause, such as early takes place under some primordial generative weakness, forms are produced which differ from all normal states. "In the new-born child, in its normal condition the arrangement of the cerebral convolutions is complete in all its parts; if microcephaly occurred after birth, these convolutions would remain, and the volume of the brain alone would be diminished, but this is not so, the growth has languished from the beginning, its fold is shortened, and has stopped growing too soon."

Giacomini believes that the nerve centres especially of the spinal cord are influenced by the cause which has produced microcephaly and at same period and in same degree. Microtholma amongst microcephales evidently shows that the fœtus, at a given epoch, has been subjected to some vital trouble, which has involved the eye and the brain at the same time. Dr. Adrini observes: "It does not require a close examination to find the principal characteristics which distinguish the convolutions of man from those of the ape. In the brain of the microcephale we do not find the perpendicular fissure which divides the brain of the anthropoid ape into anterior and posterior parts. The inferior surface of the frontal lobe is flat, and the convolutions in their divisions, volume, contour, and disposition have the form of the human type. An examination of the brain strengthens the conclusion that microcephales do not represent a degeneration in the sense of retrogression to the organic type of certain apes, but rather an arrest of development without aberration from the typical laws of organic formation through a pathological cause."

Dr. Reynolds remarks: "That the cause of mental failure in epilepsy is not identical with that which induces the attack is evident from the perfect intellectual integrity of some who suffer severely from the paroxysms, and also from the absence of all direct proportion between the degree of impairment and that of exalted motility. That its cause, however, is closely associated with that of the attacks, is to be inferred from the fact that the degree of failure does bear direct proportion to the frequency of the latter." Dr. Wildermuth states that "pathologists are in full contradiction about the state of the brain during the epileptic seizure. Some regard the irritation as arising from the cortex, others that it may be

induced from peripheral irritation, or a lesion in the cortical matter stimulating the lower part of the brain, and the medulla to abnormal action," Hallager says that "the epileptic attacks are due to a sudden interruption of the cerebral circulation producing anaemia, probably through the action of the sympathetic on the capillaries." Ireland says: "We know that convulsions may be artificially induced in animals by rapid bleeding, on the other hand, an epileptic attack has often been stopped by compressing the carotid even on one side, which would only increase the anaemia of the brain. Then again fits are sometimes arrested by the inhalation of nitrate of amyl, which has been proved to cause the smaller vessels of the brain to dilate. Doubtless there is a disturbance of the cerebral circulation during the seizure, probably unequal. Then there is a gush of motor and trophic energy, throwing most of the muscles into violent contractions, even of the involuntary muscular fibres, and increased secretion of the glands, a derangement of the vital processes, which have their own modes of action, escaping the usual check of inertia and guidance of the will." Dr. Alexander Robertson, to whom medical science is indebted for many contributions, Dr. Fere, the distinguished specialist, Bevan Lewis, one of the most skillful of microscopists, Dr. Andriezen, a specialist of note, and a host of other names high up in the annals of medical science, have given their opinions and experiences, more or less at length, on the causes of idiocy, epilepsy, etc., as they relate to feeble-mindedness that confirm and add to the data which I have presented.

Sir W. James says: "Children, the subject of extreme rickets, are almost always deficient in mental capacity and power. They are not idiots; they show no sign of idiocy; they resemble rather children of low intellectual capacity and power much younger than themselves." Ireland observes: "Where epilepsy seems to be the cause of mental obtuseness, it can be regarded only as a complication, yet it is nevertheless one of the commonest causes of insanity as well as of idiocy, and in making the definition of the classes of it, it is difficult to know where to draw the line between epileptic idiocy and epileptic dementia. If the epilepsy has caused the faculties to become impaired before the age of seven, it would seem that the patients ought to be treated as epileptic idiots." Romberg, Reynolds, and others have shown that hereditary epilepsy manifests itself at an earlier age than non hereditary epilepsy; hence one may expect to find a neurotic tendency in the parents of epileptic idiots.

In hereditary epilepsy there is an increasing liability in the descendants to have fits at an earlier age than their ancestor. "In 12 out of 25 cases, the fits showed themselves the first year, generally during teething."

The principal increase in the capacity of the skull, according to Virchow, takes place at the sutures, but there is proof that this is the only method by which it can increase. "The skull, like other bones, undoubtedly, by deposit on the one side and absorption on the other, can increase, just as the medullary canal is found in long bones, or the neural arch widens in the vertebrae. The different pieces which enclose the spinal cord are certainly formed into one bone from the third to fifth year, but after this the cavity is increased by the simple process of absorption on the one side and deposition on the other." Ireland says the skull does not limit the brain, nor does the brain extend or distend the skull; but both grow harmoniously together under the influence of the formative force inherent in the whole organism which fits the size of the skull to the size of the brain, as it moulds the limbs of either side to the same bulk and shape. It is possible, however, that in disease this symmetrical working may be deranged; the brain may increase too rapidly for the skull, or the closure of one suture may compel the brain to grow in another direction; but one is no more bound to believe that microcephaly is caused by the early closure of the sutures, than that the hydrocephalus or hypertrophy of the brain is caused by ossification."

The relation of size of brain to mental power is a puzzling question in physiology. In heavy brains, probably the weight of normal nerve tissues is increased by adventitious deposits. Ireland says: "The weight of the two spheres is frequently unequal, especially in epileptic insanity and in general paralysis." Some authorities hold that the power of thought depends on the fineness and degree of the complexity of the convolutions, or their symmetry on each hemisphere; others to the total amount of grey matter separated from the large mass of white matter. The brain is but one factor. The quality of the blood which circulates through every part of nervous tissue, the quickness of the circulation, the method of distribution of the blood vessels, and the assimilated power existing between the nourishing fluids and the nervous matter—all go to make the sum mount, and a deficiency in any of them may cause the harmony to jar.

The average size of the heads of idiots, excluding hydrocephalic ones, is somewhat smaller than the average size of those of

healthy people; however, there are exceptions to this. Idiots who have larger heads do not surpass in intelligence those who have smaller ones. According to Ireland, size of head, save in cases of hydrocephalic and microcephalic idiots, gives no estimate of comparative intelligence of children. Felix Voisin observes; "The proper exercise of the intellectual faculties is impossible with a head from 11 to 13 inches in circumference, and a measurement of 8 to 9 inches from the root of the nose to the posterior border of the occipital bone. To this rule there never has been an exception. Heads from 14 to 17 inches in circumference, and from 11 to 12 inches comprised between the root of the nose and the foramen magnum, are too small for ordinary intelligence; but heads from 18 to 18½ inches in circumference, though small heads, allow all of the regular exercise of mental faculties."

"Below 17 inches in circumference," Ireland says, "the manifestation of mental power would be feeble." But heads of this small scale are even seen among idiots, for idiocy is generally the result of disease, not of the smallness of the brain. "The name of microcephalic should be given to all heads below 17 inches equals 431 millimetres in circumference." Broca calls microcephalic every cranium which has not been artificially deformed, and whose anteroposterior diameter is less than 149 millimetres, equal 5 inches 9 lines; to heads larger than this, but still of small size, he gives the term demi-cephalic without fixing the limit of normal capacity, but he gives below 1,049 grammes for males, and 907 grammes for females, as the limit of weight. Topinard gives a horizontal circumference of 349 millimetres, equal 13 inches 7 lines to the microcephale and to the semi-microcephale, as much as from 432-17 inches to 480 millimetres, equal 18 inches 10 lines. Ireland says it may be well to hold in mind that the average brain weight in man ranges from 40 to 52½ ounces equal from 1135 to 1436, and women from 35 to 37½ ounces, equal from 992 to 1341 grammes. Fister gives the average weight in German brains as 1375 for men, and 1245 for women, and observes that the brains which weigh 150 to 300 grammes less than these generally belong to feeble-minded persons. Giacomini states that the limits of oscillation apparently in both sexes are from 1000 to 1500 grammes, the capacity of a brain 50½ ounces being 1502 c.c., equal 91 cubic inches.

Huxley has said that "when men began to understand that nature is the expression of order with which nothing interferes and that the chief business of mankind is to

learn order and govern themselves accordingly," he expressed a great cosmic truth. "It was then that for the purpose of discovering the will of the authority dominating the universe, that only through the eye, the ear, the sense of touch, etc., could they determine any fact, and their first labor was by mechanical devices to assist these senses—to see with lenses what the eye could not, and to measure with chemicals what the finger could not." The result of this was the invention of the microscope, the spectroscope, and other appliances which laid the basis for modern biology. The accuracy of the tests of these instruments is incredible to the lay mind, but logical and scientific to the specialist, because they rest on incontrovertible truth-facts which are a part of the great economy of nature.

As to the improving of human strains, our knowledge of the subject as yet is infinitesimal, and as to experience, we have none. All we actually know about it is from analogous reasoning, based on the crossings of animals and plants. But we also know that certain race mixtures produce fine types of normal manhood and womanhood, and that certain other race mixtures debase these types, and that their products are subnormal and inferior to the parent races in stability and equilibrium. But to breed men and women on the scientific and progressive scale that animals and plants are based on, we know but little about it. Before anything of the kind can be attempted our laws of marriage must undergo beneficent alterations, pseudo-prudishness be relegated to where it belongs and the reproductive relations of men and women be placed on the high moral plane which the Creator originally ordained. But this has nothing whatever to do with the part which the State now can do in improving the health and human strains of the defective childhood with us. The necessary foundation for the action of the State in the premises is the securing of the facts, the vital statistics of the idiot, the epileptic, the imbecile, and the feeble minded in its institutions, in its public and private schools, and at large in the homes of the people. These inquiries—researches should be based on law enacted specifically for the purpose. As it is the reports and registration of births, communicable disease, etc., are duties in many parts of the State more honored in the breach than in the observance.

It is said that there has arisen in all civilized societies in various ways and for various reasons, a grave and growing danger to the future of the human race. Not only has the natural elimination of the inferior stocks not been checked, but most societies permit the elimination of the superior. A

sociologist of high character and standing has stated that our public institutions for the insane, the criminal, and the defective are "monuments of our own folly," and that until the source of the trouble is eliminated we must continue to build jails, penitentiaries, etc., in order to make provision for all who ought to be within their walls. He states that it pays better to provide permanent care for a feeble minded boy or girl during the entire reproductive period, than to support their offspring, admits of no argument, and each year's delay in their permanent segregation means added expense, added difficulties, added misery.

That our social fabric needs improving no intelligent man will gainsay. As it exists today, it is really not adapted to the requirements of humanity in its moral, intellectual and physical aspects. Sociologists claim that "society as existing, is its own index finger pointing to the fact." However, one of the most encouraging and hopeful signs of the times is that "here, as everywhere, the need implies the means." Undoubtedly, as H. G. Wells observes, "there is a large amount of avoidable suffering, privation, and sorrow, and a large proportion of the generations that grow up stunted, limited, badly educated, and incompetent in comparison with the strength, training, and beauty with which a better social organization could endow it." Our ways of begetting and rearing children, permitting diseases to engender and spread, are chaotic, entailing enormous hardship and waste. We must seek an orderly plan for the half-conceived wilderness of human effort. Every society ought doubtless to organize so as to favor the survival of the strongest, most efficient, and the most valuable members. But, in fact, nearly all societies are actually so organized as to permit the physically and mentally defective to leave descendants, at the expense of the more richly endowed.

Dr. Ireland says that influence of consanguineous marriage is simply the influence of a double heredity; that marriage with a blood relation where there is strong parallelism, is undoubtedly dangerous for the offspring. He thinks that idiocy also conduces to tubercular diathesis, and that perhaps two-thirds or more of all idiots are of a scrofulous constitution. He continues: "Malnutrition or perverted nutrition, designated as scrofula, disposes to imperfect development of the nervous centres. Drunkenness is also a potent cause in forming hereditary neurosis through several generations for bringing idiocy upon the children. Children of drunken parents in nearly all cases have unhealthy nervous systems. In idiocy there may be both drunkenness and

tubercle. Indeed, sometimes the toxic action of alcohol may be the direct cause of idiocy. Deleterious and toxic agencies at different periods of gestation may produce monstrosities, genotoxic idiocy and other defects. Pellagrous parents sometimes have produced idiotic children."

The general admixture in one and the same race, according to Reibmayer, may be called far-in-and-in-breeding; that inside of a small circle of individuals of the same race, near-in and in-breeding." In-and-in-breeding produces refinement; but morbid characteristics to both parents are naturally also capable by (near) in-and-in breeding of aggravation and accumulation. "The selection from all the qualities by in-and-in-breeding depends therefore probably on an augmentation of the effect of heredity. Consanguineous breeding is entirely subject to in-and-in-breeding, for it is evident that the fixation of certain characteristics is effected much more quickly by the pairing of demonstrable blood relations." In other words, if there is any predisposition to disease in either one or both parents, or any mental or physical defect, it is likely to be augmented in the progeny of consanguineous marriage, and if the in-and-in-breeding continues for one or several generations, we may look for increased feeble mindedness and physical defectiveness in the progeny. In communities long settled where there has been little or no mixture with foreign blood, the degeneracy, mental and physical, is sometimes very noticeable.

Professor F. Kraus, of Berlin, says: "The consequence of long-continued near in-breeding is a growing tendency to degeneration. The bad influences become apparent, as a rule, very slowly and only in the course of several generations, hence why they escape in a single generation." Continuing, he says: "A complete suppression of natural selection leads finally to bodily and mental deterioration, that is, hereditary disturbance of the correlation between the single organs of the body and mind." Peipers calls attention to the fact that there is everywhere, and especially in the rural districts, a far greater amount of blood-relationship and common ancestry than one is generally inclined to admit. Professor Krusemann states that as to the results of marriage between blood-relations, there have been observed all kinds of degenerative phenomena, especially blindness, deaf-mutism, feeble-mindedness, idiocy, epilepsy, insanity, polydactylism, and other malformations.

Prof. J. Orth, of Berlin, observes that the words *inherited* and *congenital* are often used synonymously, but there is no justification for it, because although everything inherited

is also congenital, but it does not necessarily follow that everything congenital is inherited. He states "the opposite of inherited is *acquired*. Acquisitions are either extra-uterine or intra-uterine; if the latter they are congenital, but not inherited. What is to be regarded as inherited in those congenital phenomena? Surely not that which has arisen in consequence of disease in the fœtus, or through abnormalities in the ovum; as for these conditions, the maternal organism has no direct responsibility. What the fœtus receives from its mother in the course of its development is not inherited, because the essence of heredity does not consist of the circumstance that the descendants have obtained a particular peculiarity from their ascendants, or that disease has been transmitted to them by their parents, or even their ancestors."

According to the same high authority, there can surely be no difference in the essence of the process, because the placenta has played an intermediate part; that is, because the infection is a placental one. He further observes: "Whether it is through the milk that a mother conveys morphia to her nursing; whether it is through a tuberculous udder that a cow conveys tubercle bacilli to her calf, or whether the conveyance takes place through the blood of the placenta, it cannot make any appreciable difference. If any one holds the extraordinary opinion that conveyance through the milk is an hereditary transmission, what about the milk of a tuberculous cow that infects with tuberculosis not her own calf but a strange, or a human suckling? The essence of infection cannot be any different if under exactly similar circumstances it attacks different individuals. But if the conveyance through the milk cannot be called hereditary transmission, why should we speak of such when the conveyance takes place through the blood?" Lubarsch says "such a conveyance is only a special kind of metastasis, a metastasis in another individual, but in reality nothing more than what takes place when an infective agent is transmitted from one individual to another by injection into the blood." Finally, there are biological reasons why we should not consider as hereditary all that is derived from the mother during intra-uterine life.

Professor Orth observes: "Everything is acquired that arises through the influence of external agencies in the developing or fully developed individual, and for the fœtus in its mother's womb, every agency is external that proceeds from without it, whether it be situated within the maternal body or outside of it. The fœtus in this respect is not a part of its mother's viscera, but an independent being possessing its own life

from the very beginning. Only that may be regarded as inherited which has been imparted to the offspring through the germinal cells. This applies to normal as well as pathological heredity. "It is true," continues Orth, "that pathological heredity presents peculiarities and points which do not arise in normal heredity, but on the whole, there can possibly be no difference between them. To call one kind of heredity biological, and the other pathological, is so far incorrect as pathology is biology, and as general biological principles apply to biological processes, the same as the normal. But the most important biological principle, as regard heredity, is that the offspring derive their inheritance from their ascendants through the germinal cells."

According to another equally high authority, the bearers of heredity cannot possibly be situated outside the germ cells, but only in their interior, being firmly bound to the molecular constituents of the germ cells with whose internal structure they are most closely connected. "The substance which is the bearer of the inheritance has been designated as *idio-plasma* or *germ plasma*, and we can therefore formulate the maxim with regard to heredity, and that is: Only through the germ-plasma does a descendant inherit from an ascendant, only that which has passed to the descendant, the germ-plasma can be regarded as inherited. There can be no question of heredity when the new individual receives something which has been introduced accidentally by the germ-cells, as for example, if a spermatozoon enters into the ovum which it impregnates, or in other words, into the future embryo, accompanied by a tubercle bacillus. It is immaterial whether the bacillus adheres to the exterior of the spermatozoon, or whether it lies in its interior, if there is room, provided that the molecular structure of the spermatozoon, that is, the germ-plasma, has undergone no important change. Such cases have been spoken of as hereditary tuberculosis of the fœtus, but without any justification, as the germ cells have not produced the tuberculosis; they were surely accidental carriers of the infective virus. This can never be an inherited tuberculosis; we might, at the utmost, speak of pseudo-heredity. Only when the germ-cells have undergone an alteration in their internal construction, if in their composition or perhaps only in their chemical constitution, if new conditions arise thereby in the body of the new individual—which is rightly designated as the *soma*, in contradistinction to germ-plasma—the bearer of heredity which is contained only in the sexual or germ-cells—it is only then that we can speak of hereditary phenomena."

Dr. H. H. Goddard observes: "The low grade idiot has not only a disturbed brain, but his entire organism is disarranged, growth processes upset. In the imbecile the same is true, but to a less extent. In the moron we have the interesting phenomenon of practically normal growth during immature years, but an arrest of growth earlier than in the normal." He also remarks that all defectives are heavier at birth than normals, and states that sex differences are less marked as we go down the grade of defects.

No one dares to say that there are not slight borderline grades of mental defects that may not be conserved to the normal if placed under an ideal life of training treatment. Dr. Clark says "this class may be small, but there must be questionable cases of defective children who should be given the benefit of the doubt—that backwardness does not always spell irremovable defect. To this borderland, the twilight of the normal child mind, the trained pedagogue, psychologist, alienist and internist may well afford to devote their best energies—not alone for this small and possibly unproductive group of backward children, but for the enormous flood of light such study will throw upon so-called normal yet aberrant types of neurotic child-life."

If those who do not know the facts about the large number of the feeble minded which we have in our population, were to go forth and make known amongst people of all sorts and conditions, telling them how these evils could be remedied, there no doubt would be a generous response, and we would cease to say as we now do these heirs of ill condition; "We know you are unequal to the struggle of life; we know that only the most precarious livelihood is for you; we know that the discipline of the shop and street will be too much for you; we know that in a very few years you will be returned diseased and broken, a wreck seeking a home in the alms-house, or you will be locked up in jail, or confined as a dangerous lunatic—all this we know, and yet we launch you forth."

Dr. Clark recommends a careful preliminary study and investigation of every individual of need and delinquency; the proper training and care as long as required. He says the prolonged and diligent inquiry and research of the subject is three-fold. "For all this great work, great expense of time, money, thought and care will be needed. Here is an opportunity for rich men and women of intelligent good will; for legislators, and for the useful application of public funds."

It cannot be too strongly urged that feeble-minded children should have quite

as much attention as normal children; that they should have appropriate attention and not ordinary class-room work from which they can derive but little advantage. I fully agree with Mr. Devine, the editor of *The Survey*, a journal of Constructive philanthropy, published by the Charity Organization of the City of New York, that the greatest need of all for feeble-mindedness is for more institutional care. "When this has been brought about in every State we shall witness a great goal delivery even more significant than that which has followed the discontinuance of imprisonment for debt, or the abolition of the saloon, or the introduction of the probation and parole systems. Care for the feeble-minded adequately for a generation, and our expenditures for prisons, reformatories, police, fires, hospitals and alms-houses will be reduced, or what is even better, expenditures for such purposes will be accomplishing desirable tasks which we have not had the courage to undertake." There is no question that biology and economics should unite in demanding that the strains of feeble mindedness shall be eliminated by the segregation of the mentally deficient.

Section E.

Franklin B. Kirkbride remarks in his essay, "The Right to be Well Born" that a study of either town or country shows the dwarfed intellect, the perverted instinct, the weakened body, and the preventable disease in every community, and in some places they have run riot to the almost entire extinction of the finer and higher types. "The pyromaniac continues to amuse himself by destroying property and life; insidiously, but no less surely, the union of defective and degenerate parents is destroying the vitality of whole communities." As a people—nation—we should awaken to the better realization, he thinks, of the fact that from the standpoint of the tax-payer, if from no other, it is a good policy to seek out the causes of human waste and stem the tide of degeneracy. "Of all our natural resources," he continues, "the conservation of human life is surely the most important."

Another high authority says: "The segregation, care and training of its feeble-minded by any State, does not really add to the taxable cost of the people, but in time tends to diminish it, for the reason it takes out of the courts, prisons, hospitals, asylums, etc., a good percentage of such inmates, and by education, training and care makes them self-supporting. Besides it tends to prevent the increase of crime, pauperism, and immorality. In such a matter, mere pecuniary considerations should not weigh against public morality and decency, for it

would tend to lessen prostitution, which is largely recruited from the ranks of the feeble minded. The State in this matter has a moral and religious duty to perform in rescuing these human derelicts, who as much, if not more, appeal to the sympathy and charity of the people at large, as the normal school child for whom the State is annually spending millions of dollars for education. If we do for the well-born child all that money and science can do to make it a normal adult, we have at least a larger duty to perform for the not-well-born child—the idiot, imbecile, or feeble-minded, who is helpless and dependent, and requires different care, treatment and training from that of the normal. "Abnormality is not a crime of its infantile or youthful possessor—it is an unfortunate inheritance, either pre-natal or after birth, and whether it is due to hereditary disease or accident it makes no difference so far as the State's responsibility and custodial capacity are concerned. If due to parents, measures of prevention should be taken. But we have the unfortunate child, youth, man and woman in our midst—at large, in jail, in penitentiary, in asylum, and in corrective institutions—and justice, equity, charity, morality and religion demand in this age of civilization, enlightenment and culture that these matters can no longer be ignored, or put aside by claims of inexpediency or poverty on the part of the State, without danger to the general safety and well-being of the community.

Undoubtedly all groups of dependents and delinquents are made up of "large percentage of persons who are mentally defective and therefore irresponsible, incapable of doing right. Such being the case we should try to detect all the mental defectives in childhood, keep a record of them, and colonize them either at once or upon the first intimation that their parents are not taking care of them." In addition to this we should see that feeble-minded adults do not become parents.

It is said the feeble-minded child should never have been born, but it cannot be put out of existence. It should not be put in the almshouse, reformatory, asylum or prison. It should be segregated in an institution or colony where it can be developed and trained. Feeble-mindedness in the child should be detected early, and it must be protected always, for, although many feeble-minded children can be made self-supporting, few, as Dr. Fernald tells us, can become self-controlling. Biology informs us, as well as our own experience, that "the years of the greatest receptivity of the normal child, as well as the defective child, are the early years. And the mind of every

child, whether normal, sub normal, or super normal, should be trained to the fullest extent possible, so that he may reach the highest development of which he is capable."

Dr. Goddard also very pertinently asks: "What should be the policy of the State in regard to the feeble-minded after they have been discovered?" And then proceeds to answer the question by saying: "They must be removed from their present environment, be segregated, colonized in groups where they may become somewhat useful, and where they may live natural lives in comparative content under the guidance of those who are wise and intelligent and capable of directing them. The feeble-minded must be cared for and kept in an environment where it will be impossible for them to become public nuisances." Many parents, he states, are either normal or of such a high grade of defectiveness that they never get into court, and yet they have feeble-minded children. "We cannot touch these adults, but somehow we must get hold of their children. The child thus brought to official notice will be examined as to his mental development. If he be normal, he will go on to school; if merely backward, he will be placed in a special class; if he be an idiot, imbecile or a moron, his condition will be recorded. At the proper time and in the proper way the parents will be informed of the condition of the child, and of the willingness of the State to take care of it in a colony."

Feeble-mindedness, as a continuing heritage, is a persistent cause of poverty, dependence, crime and misery, and must sooner or later be abolished. No doubt certain forms of disease lead to the impairment of the minds of normal infants, but "the feeble-mindedness which fills the almshouses to overflowing, recruits the jails and prisons, clogs the reformatories, furnishes victims to the white slave traffickers, and intermingles with the healthy streams to gain a new vitality and to extend its blight to hitherto untainted families, is undoubtedly largely due to heredity." The feeble-mindedness which is obvious "obtrudes itself whether we like or not upon public notice, laughing to scorn our penny-wise policy of imposing pounds sterling of foolishness on every tax-payer. This surplus feeble-mindedness we drain off as the true conservationists are showing us how by providing adequately for all who will voluntarily accept custodial care, and for those who are dangerous to their neighbors, even though it means compulsion."

Edward T. Devine, in the Survey of March 3, 1912, in writing of feeble-mindedness says that by segregation in comfort-

able and well arranged institutions we can attack the evil at its source. Referring to probable parsimony in the appropriations for such institutions, he observes that there will follow the decay of the future man and woman for the saving of a little wealth. "From feeble-mindedness come a large part of all our prostitution, alcoholism, crime, pauperism, and disease. By neglecting to provide such care, and by treating the feeble-minded as if they were responsible for their acts, we are guilty of the most astounding folly, the most complete disregard of all sound principles of human conservation. The fatuous policy which has condemned to prisons and reformatories thousands of unfortunate children of mature years, but immature minds, which have left at large tens of thousands to become harlots, drunkards and paupers who should have been recognized even in childhood as incompetent, and tenderly cared for if necessary at public expense; and which has entailed upon us and our posterity a grievous burden of illegitimacy and degeneracy tenfold more expensive than all the hospitals and institutions for which State boards of charities and State conferences of charities have been making their vain petitions."

It is claimed that we need a basis for a complete social policy of accurate statistics of feeble-mindedness. Europe in this respect is far in advance of the United States. The study of eugenics began, as it were, yesterday with us, and as we advance in the same, we will likely adopt better and more appropriate means to gather such facts and data of value and consistency which the United States Census found it so very difficult to get that it abandoned the quest altogether. However, Congress is making a move in one direction of this subject, by having before it for consideration a measure which will enable the Commissioner of Immigration to detect and exclude alien immigrants who are mentally unsound and physically defective. The defectives of all kinds should be excluded. But at this late date, when we have already admitted into the country, since the middle fifties, nearly 30,000,000 of foreign immigrants, it seems like locking the stable door after the horse has been stolen. One thing, however, is certain, and that is, that we have imported a very considerable amount of foreign feeble-mindedness, which has been augmented in the last decade or so, and which since its arrival, has multiplied so largely as to fill many of our almshouses, prisons and correctional institutions, besides tainting to a certain extent, the blood stream of normality and health.

While it is well that the National Government maintains the strictest supervisory

measures over immigration in the matter of examining immigrants to see that "none who are suffering from contagious diseases, or who are paupers, or who are feeble-minded are admitted to the country," at the same time the tests used, especially as regards feeble mindedness, should be specifically scientific, comprehensive, and exhaustive. There will, we hope, not be much complaint hereafter on this score, as there is about those already admitted. There is now a very large group of these foreign defectives in the country who are breeding a race of feeble minded people more dangerous than many barred by the immigration inspectors. Dr. Goddard observes: "There is an army of law breakers as to whom it is a serious question whether the punishment be 60 days in jail, or permanent care where they will be harmless and content; yet little is done to determine their responsibility. The only thing for the State to do is to establish stations where these cases may be all carefully and critically studied, so that the courts may be able to act intelligently upon the facts."

The Eugenic Review of London, England, July, 1911, in speaking of the segregation, care and training of the feeble-minded, remarks editorially: "If it is asked, 'what would be the use of this?', and if it is objected that it would be too expensive, we would answer that the results to be expected are at least three-fold. We may hope thus to learn much that we do not know as to the heredity and natural causes of feeble-mindedness, and as to how the feeble-minded can best be treated so as to make them useful and happy. In the second place, well-conducted schools for the feeble-minded must have a great effect on our prisons. Even with our present knowledge, we know that a considerable portion of prison population should certainly be in such schools, and further research may show more than we now think might with advantage be thus transferred. But besides relieving the prisons of such inmates, these schools certainly would afford a more excellent way—a more scientific, common sense, and religious way of training these unfortunates. Thirdly, these trainers of feeble-minded children would constantly remind us that their pupils differ from the normal only in degree and not in kind." Some of the more advanced institutions for the care, education and training of mental and physical defectives have among others the following departments: A psychologist, with two assistants; a bio-chemist, with two assistants; an anthropometer, with an assistant; a neurologist, with an assistant; three field workers in heredity; a chief of the case history work, with three assistants;

an editor, with an assistant; a chief of experimental pedagogy, with teachers and trainers; a food specialist; a librarian, stenographers, clerks, etc.; various apparatuses, library, etc." In this connection it may be well to remark that notwithstanding the enactment of the National Pure Food and Drug Law, pure food, pure drugs, and pure products of every kind can only be secured by the exercise of a police power delegated by the community to local, State and national government.

Dr. L. P. Clark, who is a specialist on idiocy and laboratory research, in connection with it, concludes that the whole question of the nature and cause of feeble-mindedness needs a thoroughly detailed study from all standpoints. "Now that State care and segregation of mental defectives are in the ascendency in sociological progress," he says, "we may look forward to a time when all institutions caring for this class will have properly equipped laboratories for studying this problem." According to his view a thorough and systematic scheme of research into feeble-mindedness should embrace:

"(1) Intensive research of family stock to record environment and parentage from which idiocy is recruited.

"(2) Studies in the institutional laboratories along approved methods of psychology, anthropology, and clinical pathology.

"(3) Finally, when we have traced the individual idiot from his stock-origin through his individual reactions to the ideal colony life in all its training features of mind and body, involving the modifying influences of such training and care on his development and growth, the laboratory of research should be equipped so as to analyze the whole terminal state at death."

The police statistics of habitual criminals in the slums of cities indicate their reversion to the condition of "the free savages who once roamed the forests of Germany or Britain." Lombroso found features common to both "scanty hair, light bodily weight, small cranial capacity, retreating forehead, early synostosis of sutures, large temporal sinuses, great development of the under jaw, inequality of the orbits, unclean skin, large deformed ears, close resemblance between the sexes, insensibility to pain, callousness of disposition, courage combined with cowardice, or idleness, boasting and superstition, fondness for metaphor and taste for tattooing." But other authorities say that many of these traits are not characteristic of savages—that scanty beard is found on the Mongolian and Negro but not in the German or other branches of the Caucasian race. Indeed, some savages have also large and well formed crania. To sum

it up, Ireland says, "the habitual malefactor who fills our jails is a degraded product of our complex civilization."

Section F.

Dr. Hock, a British alienist, has compiled the following table to indicate the proportion of idiots to lunatics. For every 100 lunatics there were in—

Wurtenburg,	97 idiots.
Prussia,	158 "
Bavaria,	154 "
Saxony,	162 "
Austria,	53 "
Hungary,	140 "
Canton of Bern,	117 "
France,	66 "
Denmark,	58 "
Sweden,	22 "
Norway,	65 "
England and Wales,	74 "
Scotland,	79 "
Ireland,	69 "
America,	79 "

In England in 1891, there was one insane person to every 298 of her population. In Scotland there were in 1891, 259 insane to every 100,000 of population. The number of feeble minded in the United States in 1890 was 95,609; and the number of feeble-minded per every 1,000,000 of population in 1890 was 1,526. The insane for the same year per 1,000,000 numbered 1,679. Dr. Fernald says in the country as a whole there is about one feeble-minded person to every 500 of the population, but this is thought to be somewhat of an underestimate, and that one to every 300 of population would come nearer the mark. Dr. Ruman estimates the epileptics in New York State alone at 15 per 10,000 inhabitants, and that 18 per cent. of all chronic epileptics fall within school attending age.

Dr. Isaac Kerlin found four idiots in 100 families in Philadelphia in 1880, as a concurrence, imbecility and insanity begetting 27 per cent. Dr. Koch found that 24 per cent. idiots had brothers and sisters abnormal. Ireland says that hereditary disposition has been noted in from 20 to 50 per cent. of all idiots and imbeciles. Dr. Rogers, late of Glenwood, Iowa, now of Fairholt, Minn., found marked hereditary neurosis in 25 per cent. of the cases he examined. Dr. Herman Piper, of Berlin, in 1893 found that 18 per cent. of congenital idiots had nervous diseases in parents and relations.

Grafton D. Cushing, speaker of the Massachusetts House of Representatives, in his inaugural address, March, 1912, said: "There are at least 9000 feeble-minded persons in Massachusetts whose condition is a serious drain on the sources of all pub-

lic and private charity. The feeble-minded almost invariably become the dependent, the delinquent, or diseased members of our community, and their offspring become equally a charge to the State. There are now cared for in various institutions about 2000 feeble-minded, and there are 7000 more, the ultimate burden of whose criminality and immorality will be a cumulative burden and expense to the State until proper segregation has been provided. It has been calculated that if \$300,000 a year were spent for fourteen years sufficient accommodations could be provided for the segregation of these unfortunates. It is a large sum but the necessity is urgent, and unless the State meets the problem promptly and courageously, the constantly increasing cost of the feeble-minded and their descendants through our courts, prisons, hospitals, asylums, and charitable institutions will probably amount to more than that large sum without checking the evil."

Of 85 cases from the reformatory at Elmira, New York, during 1904, who were declared beyond question to be feeble-minded, 37 had been arrested at least once after leaving that institution. Of the 100 cases in the public schools of New York, Dr. Moore found 63 to be immoral or delinquent. If the Binet tests in themselves are conclusive, according to another high authority, "out of 100 young women tested, from 16 to 29 years of age, there was found not one who was normal mentally. If these tests accurately measure their mentality, these young women with their physique, the strength, the appetites and the passions of grown women, with their experiences of the life in the under-world, have only the average mental capacity of little girls of 10 years to guide their own lives." Of another 100 young women examined, 75 came from New York and 25 from other States; 22 were foreign-born; 37 were American-born, with both parents foreign-born; 30 were American-born of American parentage; 71 were committed for soliciting or as common prostitutes; four for habitual drunkenness; 25 for felonies and misdemeanors. Of another lot of 25 young women committed for sexual offences, all but six gave a record of immorality, two being married women and four domestic servants. In all these cases more or less feeble-mindedness was evidenced.

Of the 42,750 children of Boston, Massachusetts, examined by school physicians during December, 1911, and January and February, 1912, only 14,957, or 35 per cent., were found to be physically normal, healthy children. The defective children, physically below par, numbered 27,795, or 65 per cent. The defects in detail were as follows: Men-

tally deficient, 223; defective nasal breathing, 3,562; hypertrophied tonsils, 9,738; defective teeth, 19,518; defective palate, 86, cervical glands, 4,425; pulmonary diseases, 456; cardiac disease, 1,129; nervous disease, 213; orthopedic defects, 521; skin affections, 3,509; rickets, 575; malnutrition, 1,611.

Dr. Goddard, director of the training School laboratory for the feeble-minded at Vineland, New Jersey, in his essay, "Social Investigation and Prevention," states that "300,000 people in the United States are feeble-minded; 500,000 have not sufficient intelligence to manage their own affairs with ordinary prudence; and a still larger number have not sufficient will power to force themselves to do the right thing when it is pointed out to them." This army of 300,000, 500,000 or more furnishes the recruits for the ranks of the criminals, the paupers, the prostitutes, the ne'er do-wells, and others of our social misfits. Managers of our jails, reformatories, and prisons estimate that from "4 to 5 per cent. of their inmates are mentally defective." In fact, actual tests which have been made in some of our reformatories for girls and boys show that at least 25 per cent. of them are distinctly feeble-minded. Goddard thinks that a large percentage of the paupers in our almshouses are mentally defective, and have become public charges because of inability to earn an honest livelihood.

The army of irresponsible law breakers which every considerably populated State in the Union has in its midst, is a matter for the gravest consideration of our lawmakers and publicists, and requires the exercise of the best type of statesmanship and humanitarianism to settle in the interest and well-being of the whole community. As it is, States are spending hundreds of thousands of dollars to suppress, punish the steadily increasing force of human derelicts, and but very little towards their amelioration and prevention. The money spent in examining persons accused of crime with the view to determining their guilt or innocence is oftentimes an unnecessary waste of the people's funds. It is like plugging up the bung hole of a cask and letting the water escape through the spiget. "The idea of subjecting to criminal prosecution and punishment a group of feeble-minded people, as undeserving of punishment for the crimes they commit, is as preposterous as punishing the man who shoots his neighbor by accident."

In 1908 the English Royal Commission reported for England one feeble minded person in 217 of the population; for Scotland, one in 400; for Ireland, one in 175. In 1910 the director of Public Health and Charities of Philadelphia made a census of

the feeble-minded in that city, and found, with a total population of about 1,500,000, more than 3000 evident cases, and 8000 so deficient that the statement of their mentality depends principally on the view-point of the examiner.

In 1911, the pupils in the public school in a town of 10,000 inhabitants were carefully tested by trained observers, using the Binet measuring scale, and the test showed one feeble-minded child in 200. The commission appointed to locate the site for the Letchworth School for the feeble-minded in New York State, estimated that there were about 12,300 feeble-minded persons in that State.

St. Louis cares today for 400 dependent and delinquent children of all ages and races in the same institution. If the bill now before the legislature of Missouri becomes a law, dependents and defectives will be separated. Missouri has about the same population as Massachusetts, and if the latter can find boarding houses for 4000 defective children, then Missouri ought to be able to find some too.

The Training School, a publication issued monthly by the Vineland, N. J., Training School for the Feeble-Minded, in its issue for March, 1912, states that a letter of inquiry was sent out by it to State reformatories and industrial schools, asking: "(1) The number of inmates in institution; (2) the number considered mentally defective; (3) whether or not such cases were desirable in an institution of that character; (4) what has been found the best method of treatment; (5) what was the estimate of success in the treatment of such cases." There were received 34 replies to the 37 letters sent out, representing 13,188 cases, of whom 14.5 per cent. were mental defectives.

The field workers of three institutions in New Jersey have reported 4,124 cases of feeble-mindedness not in institutions, and 1,348 in institutions of that State. Four families studied by the Training School for the Feeble-Minded located at Vineland, New Jersey, show 2,798 individuals, of whom 687 are known to be feeble-minded and 1,532 undetermined. 267 families traced under the auspices of the same school, show 11,345 individuals, of whom 1,049 are known to be feeble-minded, and 6,219 undetermined.

It is authoritatively stated that from 60 to 70 per cent. of the cases of feeble-mindedness are hereditary. Alcoholism, tuberculosis, and syphilis are found inextricably mixed up with this condition. Only about 10 per cent. of the feeble-minded in the United States are cared for in institutions.

The foregoing facts and figures are merely the surface showings of this great incubus

upon our normal population, and give but an inkling of the final story to be told of our barbarous and inhuman treatment and criminal neglect of this great army of irresponsible unfortunates, some of whom we imprison, hang and electrocute. In order to avoid further perpetration of this great wrong, there should be made more persistent laboratory research into the causes of feeble-mindedness, and the science of eugenics be more closely studied, so that we can better understand the make-up, life, and growth of the individual child, and to more attention be given neuro-pathologic studies of the lesions found in the *entire* body after death.

In the public schools of the Union, especially in the Northern, Eastern and Western sections, where the foreign element, with its descendants, is largely represented, and the Southern States, where in-breeding has been more or less practiced, a constant watch should be kept for those who require institutional care, and for those who can be retained safely in the schools and taught with success in special classes.

In New York State a bill is now before the legislature which authorizes the appointment of a commission to examine the feeble-minded, epileptics, criminals, and other defectives in the State hospitals for the insane, State prisons, reformatories, and charitable institutions, and to perform operations to prevent procreation on their part when in the judgment of the commission their offspring would inherit a tendency to insanity, crime, etc. In the State of Washington a law of this character is already in operation, but it goes a little further. It examines the candidates for matrimony, and if either or both parties are found wanting in the essential factors of health, mental and physical normality, marriage between them cannot take place.

From the foregoing it will be seen with what a vast amount of crime, pauperism, and feeble-mindedness Europe and the United States have to contend, and in view of the methods of collecting, collating and verifying the statistics relating to the same are imperfect, and in many instances based wholly on estimates, the figures given are more likely to be under than above the actual facts. The United States for nearly half a century has been the dumping-ground for the criminal, pauper, and feeble-minded emigrants of southern and eastern Europe, which in connection with our native production of the same, has made us the "melting pot of crime, pauperism, and feeble-mindedness" of such vast proportions, that we are astounded—thunderstruck by simply glancing over the rim of it.

But as Matthew Arnold says, "there is

abroad in the universe a power not within ourselves that makes for righteousness," so let us pray that it will make for the assured protection, tender care, and proper training of the feeble-minded in our midst.

Laparo Hystorotomy *

By Dr. J. T. Burrus, High Point, N. C.

The spirit of our Guild in the discharge of duty should be the saving of lives. In no field of medicine has ignorance or negligence told in such glowing language as in the field of obstetrics. Many mothers are resting today in our church yards because of ignorance or negligence. I wish to preface my text just here and state that every obstetrician should exercise the same rigid antiseptic measures as the abdominal surgeon.

It is comforting to us to know that only rarely it becomes necessary to resort to Laparo Hystorotomy, but that there are cases (and perhaps more than we recognize) who should be subjected to such procedure is unquestioned by those of us who have practiced obstetrics a goodly number of years. Again I ask myself this question: Why do we see more Laparo Hystorotomies in the North than in the South? (That this is true, I am sure you will not question). Surely, it is not because our Northern women are less in stature than the women of the South or less capable of giving birth to their offsprings. By no means! My hypothesis is that our Northern physicians, living near large medical centers, have learned some of the niceties in diagnosing this condition and are acting bravely upon their judgment. Perhaps it is not amiss for us to study for a moment a bit of the history.

I once thought that Caesar was delivered from his mother's womb by the abdominal route, and because of this it took its name Caesarian Section, but nowhere in history can I find this statement proven; on the contrary, the custom was before Caesar's day. Early in the history of Rome there was an edict issued prohibiting any mother from being interred without the child being delivered from her.

In accordance with this order a Roman peasant made a stab wound in the abdomen of his dying wife accidentally removing a living child.

In 1610 Troutman did the first Laparo Hystorotomy, which was unsuccessful. He did two more during his career as a practitioner of medicine, one of which was successful, saving both mother and child.

*Read before the Hendersonville meeting of the North Carolina Medical Society, June 19, 1912.

Again the Roman Catholic Church very much opposed embriotomy. So unpopular was it, many who were willing and capable of doing embriotomy refused to do so because of the severe criticism which followed. The subject of Laparo Hystorotomy was practically abandoned until the advent of antiseptic surgery, since which time it has become very popular. Lusk says it is much less dangerous to the mother than embriotomy or symphyotomy.

What are some of the indications of Laparo Hystorotomy?

First, I wish to ask that we review the measurements of the fetal head in all its dimensions. Also a visit to our text would help us to learn of the average dimensions of the inlet and outlet of the pelvis and the use of the pelvimeter, maternal or fetal distotia. Rachetic dwarfs conjugate diameter $2\frac{1}{2}$ to 3 inches. Flat contracted pelvis, carcinoma of the cervix, pelvic tumors. Stenosis of vagina. These are the principal causes which would lead to advise Laparo Hystorotomy. I know that in more cases than one I have labored diligently to deliver a child by the vaginal route, and eventually succeeded when the smallest diameter of the child's head was much greater than the largest dimensions of the mother's true pelvis. The condition that my patient was left in goes without saying.

I remember on one occasion I with three others labored three hours to deliver a child and we succeeded, but we should have advised and insisted on Laparo Hystorotomy. This case was in a patient very obese and with a flattened pelvis. I do not believe the true conjugate would have measured over three inches. Never did the head engage, notwithstanding the os was completely dilated. We did a high forceps and with all the force that could be brought to bear, resting each other in turn for this period. We delivered a dead child and separated the symphysis of the mother.

Child's says that in every case where the head does not engage in the pelvis, if the head is presenting, it is a case for Laparo Hystorotomy because of too large a fetal head or too small a pelvis. The preparation of a patient for a Laparo Hystorotomy is the same as that for any other abdominal section; the time for the operation is when the cervix and os have begun to dilate.

The Operation.

Incision 7 inches long above umbilicus through the abdominal wall; locate the tubes so we may be sure the uterus is not twisted on its axis; pack off the uterus through the abdominal cavity, make a 6 inch incision antero-post through the fundus of the uterus exposing the membraes,

then quickly perforating the membranes, grasping the feet of the child and delivering. The hands should not be withdrawn from the uterus until the delivery of the child is complete; clip the cord as in normal delivery and pass child to competent assistant, who, if need be, begins resuscitation. If the placenta has not already detached itself from the walls of the uterus a gentle squeezing of the placenta will make it easily separate from its uterine attachment, and is now removed through the abdominal wound. The uterus is sutured with a No. 4, 20-day chromic cat gut, which is passed through the muscular wall of the uterus. These sutures are interrupted and are placed deep. When these are tied, the bleeding is practically controlled; this is reinforced with a continuous suture of silk or linen through the fibrous layer. As a rule, very little hemorrhage accrues if the operation is done rapidly. If it should occur it should be controlled by gently kneading the uterus and the application of hot packs while the assistant gently grasps the broad ligament and makes compression upon the uterine artery with his fingers. The abdominal wound is closed as in any other case of laparotomy.

The post-operative treatment varies very little from that of hysterectomy. I do not believe that a poro operation should be resorted to unless it be where the uterus is in a state of fibrosis, neither do I advocate the ligating of the tubes unless it is in thorough accord with the parent.

Acute Rheumatic Fever with Endocardial Complication.

By Dr. Wm. F. Mitchell, Shelby, N. C.

If apology were necessary for presenting such an old subject to this body, my reply would be that with all our vaunted knowledge we do not begin to know all about our most common diseases, and were we to cease the further discussion of them it might be considered as evidence that either the last word had been said or that we were satisfied with our present knowledge of them. Again there were few if any acute diseases whose complications and consequences are fraught with more danger to the future of the patient than that of Acute Rheumatic Fever, hence it must retain more or less interest to the student of Medicine. Indeed some writers class it as next in importance to Tuberculosis among the diseases of early life. It is not my purpose to give a text book description of this disease and its complications, but to briefly call attention to some points that have impressed me as being important in their diagnosis and treatment. Neither is it my purpose to

discuss its etiology further than to say that it is supposed to be an acute infectious, and non-contagious disease due to a specific organism which has not as yet been certainly isolated. Much time and labor has been expended in seeking its cause, but the bacteriology of the disease is still under discussion, and there is no way of making a diagnosis aside from the clinical symptoms. The weight of opinion at present among investigators is that it is a streptococic infection, the tonsils being the portal of entry. As the disease prevails more extensively during the winter months cold and exposure must be considered as etiological factors in so far as they lower body vitality. Excessive acidity which is always present is now looked upon rather as a result than a causative factor. Although an endemic disease it seems to be more prevalent in some years than in others, for my attention has been directed to it from the fact that a greater number of cases have come under my observation within the past two years than at any similar period. Young adult life is the age at which acute Rheumatism is more prevalent, but it is by no means an infrequent disease in children above ten years of age. As to the diagnosis of acute Rheumatic fever it would at first seem that this ought not to be difficult, but as a matter of fact there has been and is still more confusion and lack of diagnostic precision in affections of the joints than perhaps in any other class of diseases. This is largely due to the error, in which the profession has fallen of diagnosing all forms of joints trouble as Rheumatism, and a failure to differentiate between true Rheumatism and the various forms of Arthritis that either accompany or follow Tuberculosis, Gonorrhoe, and Scarlet fever. The chief diagnostic feature of acute Rheumatism is its polyarticular characteristics. This tendency to wander from one joint to another is so very characteristic, that any diseases affecting one joint alone is strong presumptive evidence against it being Rheumatism. I cannot now recall ever having seen a case affecting only one joint that proved to be genuine Rheumatism. I dare say however that many of us have seen such cases treated heroically with Anti-Rheumatic remedies, only to find at last that there was some form of Arthritis other than that which accompanies Rheumatism. This has been I am sure a common error in diagnosis and ought especially to be avoided as it subjects the patient unnecessarily to harsh treatment without any possible benefit of his condition. In no disease is the saying more true that "he who diagnoses well will cure well". Notwithstanding the frequent therapeutic failures

in the treatment of acute Rheumatic fever I am still of the opinion that we have a well nigh specific in the salicylates. Their effect upon the course of the disease is sometimes most striking and can be much likened to that of Quinine upon Malaria. There are doubtless some cases in which this specific action is not gotten but they are the exceptions. In my own cases the benign influence of the Salicylates when employed early and in large doses have been marked and satisfactory. It is quite certain "they will not disinfect the pus of a scarlatinal joint. They will not immobilize and clear out a Tuberculosis joint. They may stop the pain of gout, but we cannot expect their full, rapid, and beneficial action except in cases of genuine rheumatism." There is some difference of opinion among physicians as to the best method of administering the salicylates. I am, however, an advocate of large and frequently repeated doses until the patient is brought under the influence of the drug, for in administering small doses a tolerance for the drug may be acquired and in thus prolonging the disease we increase the tendency to cardiac complications. The toxic symptoms from the salicylates about which some physicians complain, I have been fortunate in not experiencing. The alkalies are thought to exert a beneficial influence upon the course of the disease by preventing a plastic condition of the blood which is always present in acute rheumatism, and thereby lessening the tendency to cardiac involvement. I am sure they do good in diminishing the excessive acidity and it is my habit to exhibit them along with the salicylates.

This brings me to what I consider the most important part of this subject, the endocardial complication. Indeed, I might say the chief object I have in view in presenting this paper is to call attention to this grave and far reaching complication. Endocarditis is such a frequent accompaniment of acute rheumatism that it might rather be called a symptom than a complication. It occurs with greater frequency in the young than in adults, the per cent. of involvement being variously estimated by different writers. In my own cases it has been met with in more than fifty per cent. of all cases. So far as I know there is no absolute way of telling when this complication has taken place aside from a physical examination of the heart. There may be an acceleration of the pulse, and a rise of temperature which might direct our attention to the heart, but as often as not they are absent. These patients do not suffer from dyspnoea and usually there is an entire absence of all symptoms referable to the heart. The left side of the heart is most frequently affected and

physical examination reveals a loud systolic murmur over the mitral area. It should be the invariable rule of the physician to make repeated examinations of the heart in the course of all rheumatic affections, for the prognosis of endocarditis depends more or less upon its early recognition. Too often this complication is not discovered until the articular symptoms have subsided and the patient is up and going around. So much damage may have been done by this time that the patient is often incapacitated through life. The gravity of the cardiac involvement does not necessarily depend upon the severity of the joint trouble, for I have observed well marked endocarditis when the articular symptoms were so mild as to give the patient little or no trouble at all.

It should be the chief aim of the physician to prevent this complication of acute rheumatism, and while it is true that we have no direct preventive for endocarditis I believe if we would promptly put our rheumatic patients to bed and keep them there until all articular symptoms have disappeared, and at the same time bring them under the influence of the salicylates, the severity and frequency of this complication would be greatly diminished. It is not thought that the salicylates have any protective influence upon the endocardium, but by shortening the attack they lessen the tendency to endocarditis. When the endocardium has once become affected nothing is so important in the treatment as absolute rest in bed. This cannot be emphasized too strongly, for the average patient does not realize the gravity of the heart lesion and looks upon it as entirely unnecessary to be confined to the bed after the articular symptoms have subsided. As to how long these patients should be kept in bed would depend upon the extent of the damage to the endocardium and whether or not the valves were affected. In ordinary cases without valvular or myocardial involvement they should not be allowed to get up for some time after the fever has subsided, and the pulse has resumed something like the normal in frequency and strength. To permit them to get up earlier than this is to allow them to take their life in their own hands. Aside from the above treatment there is little else to be done for these cases. Aconite should be cautiously given to reduce rapid heart action. Digitalis is contraindicated unless there is distinct cardiac weakness. Endocarditis may terminate in one of several different ways. Complete recovery is possible but this must be quite rare. While preparing this article I had occasion to examine several patients who had been under my care within the past three years, and in

every instance the endocardial murmur was still present. Most often the acute symptoms are followed by a subacute or chronic condition of the endocardium which may remain for months or years, but sooner or later terminates in valvular disease. Patients suffering with chronic endocarditis may go for quite a while without suffering any special discomfort, but are incapacitated for any hard or strenuous work. In some cases where the myocardium seems to be affected the results are more immediate. Such a case recently came under my observation. And on account of the myocardial complication compensatory hypertrophy failed to take place, the heart rapidly dilated with a fatal result in a few months.

In closing I wish to call attention to the prevalence of organic heart disease and also to the fact that it is decidedly on the increase. In a comparative table, recently compiled by the Equitable Life Insurance Company, showing the mortality per hundred thousand of our most common diseases, in twelve of our largest cities, those from organic heart disease were only exceeded by that of tuberculosis. Inasmuch as the majority of all organic heart affections are the sequel of some infectious disease the time is coming when they will be classed among our preventable diseases. I am persuaded that if we were more accurate and painstaking in the diagnosis and treatment of acute rheumatic fever we would go a long way in preventing endocarditis which is such a fruitful cause of chronic valvular disease of the heart.

Dementia Praecox With Special Reference To The Predementia Stage.*

By Dr. Paul V. Anderson, Richmond, Va.

Dementia Praecox is the name given to a group of cases which are characterized by a pronounced tendency to mental deterioration of varying degrees. Fortunately, however, dementia does not occur in all cases. The disease comprises from 14 to 30 per cent. of all admissions to insane hospitals. As the name indicates, the disease occurs in young people, more than 6 per cent. of the cases occurring before the twenty-fifth year. The average age of onset is from one to four years older in male than in female patients.

There are three forms of the disease: the hebephrenic, the catatonic, and the paranoid. The hebephrenic form is characterized by a gradual development of a simple, more or less profound mental deterioration, and the characteristic symptom is childish silliness and senseless laughter.

Suitable treatment in the earliest stages usually produces some improvement in these cases, but about 75 per cent. of them show profound mental deterioration, and in only 8 per cent the symptoms entirely disappear, and leave the patients in their normal condition. In some, who apparently recover, deterioration occurs later in life in others, there seems to be a stunting of the mental development. Many a mental shipwreck resulting from dementia praecox whose academic education was interrupted by the psychosis has been unable to go on with his business or professional life, and has been compelled to care for a farm or some small business. The catatonic form of dementia praecox is characterized by stuporous states, with negativism, hyper-suggestibility, uniform muscular tension; excited states, with stereotypy and impulsiveness, leading in most cases, with or without remissions, to mental deterioration. Some of those cases remain in a stupor for as long as five years. In 27 per cent. the dementia is of light grade. About 13 per cent. of these patients seem to recover. In the paranoid form of the disease there are numerous and interchangeable delusions, both persecutory and expansive in nature, associated with a moderate degree of excitement and a rather rapidly developing dementia. The second class of these paranoid cases is characterized by fantastic delusions, usually accompanied by numerous hallucinations, which are more coherently developed and expressed for a number of years, when they either become incomprehensible or disappear altogether, leaving the patient in a moderate dementia. The outcome in these cases is always deterioration.

During the past five years we have paid especial attention to investigating the history of the past lives of our cases of dementia praecox. About forty per cent. of insane patients seen by us have been cases of dementia praecox, and we have been especially impressed by the fact that, as children, many of them were not defective, but rather peculiar—different from other children, and did not have "healthy mental habits—habits which could have formed a sound, balancing influence in their conflicts." Some were unable to keep up with their classes at school, but a few of these backward at school had great mechanical skill and marked inventive genius. Some were abnormally bright. Many were seclusive, reticent, shy and excessively sensitive. They avoided games—especially rough school games. They did not have chums as do normal children. Many read a great deal, especially the Bible; were excessively religious—conscientious to a fault,

*Read before the Hendersonville meeting of the North Carolina Medical Society June 18-20, 1912.

and were dreamers. So satisfied were they with their dreams and good resolutions that they lost sight of the real and "developed an insidious tendency to substitute for an efficient way of meeting difficulties a superficial moralizing and selfdeception." Finally, their abnormal habits become so fixed that a life of action became impossible and under a strain which would mean nothing to a normal individual, they broke down mentally. Dementia praecox, according to Dr. Adolph Meyer, is a deterioration of habits, and especially a deterioration of the instincts of action. This is indeed true, for these individuals dream of doing but are satisfied with dreaming, and they accomplish nothing.

If you will allow me to present a few histories of cases observed in the State Hospital at Morganton, North Carolina, and in Richmond I can better illustrate the points I wish to make.

The first case occurs in a boy twenty years old whose maternal aunt was insane. He was always quiet: sober-minded; of good habits; was exceedingly bright in high school and entered college at seventeen. He failed to pass several of his first examinations at college, however, and did even worse with his final examinations; complained during the year of his eyes, but examination showed no Ocular trouble; said he could not concentrate his mind and didn't feel well. He did not return to college the next year, but the following fall entered another college with his brother; remained only a short time and returned home suddenly; he realized that he was unable to do mental work. Soon he became badly upset and was committed to the Hospital. He is now silly, simple, and rather markedly demented. Apparently the insanity had been developing for three years, as manifested by his inability to concentrate his thoughts; his indefinite feelings of discomfort, and his imaginary eye trouble. If these premonitory signs of mental break-down had been recognized, and had the boy been taken out of school and given proper rest and care, the resulting insanity might have been averted.

M. A. was spoiled as a child and allowed to have her own way in everything. She was sensitive, and was suspicious of her teachers; would not play with her fellow school children because she thought they imposed upon her, and, at times, she fought them. After puberty, which occurred at thirteen, she became very seclusive and was moody. She did not confide in her girl friends because she thought they could not be trusted. The companionship of boys was avoided because they swore, and she feared that she would become contaminated

by association with them. She could not learn well at school, and could not remember what she did learn. This failure to make progress distressed her and she worried over her spiritual condition because she thought she was not living right. She quit school because she thought her teacher treated her badly, and she brooded over this. In August, 1910, she had marked delusions of persecution; thought everyone was against her, and especially thought that her purity was doubted. Finally she became exceedingly violent, obscene and profane, and it was necessary to commit her to the Hospital.

B. B. has always been seclusive, sensitive and timid; would not play with children; stayed in the house with her elders most of the time; learned exceedingly well at school and has always read a great deal. She didn't like the boys; in fact, she would leave the room when they came to her home. She has never taken any interest in dress, and has been exclusively religious all her life. She has never depended on herself, but has looked to her sister to plan for her. She could sew quite well after her sister had planned and cut out a garment, but could not do this on her own account. After awhile she quit going to church; became more and more seclusive, and, at times, refused to see even the members of her own family. In October, 1910, she became upset; thought that some one was exerting a bad influence over her and was trying to make her bad. She thought also that everyone was against her; that she was being poisoned, and she refused to eat and drink on this account. It was soon necessary to commit her.

L. J. was brought up on a farm, but worked irregularly. He states that at school he could not get his lessons as well as the other children; was worried so much by the effort to prepare his lessons that he became discouraged and quit school. Quoting him: "I am easily bothered and worried and I am slow to think and slow to learn and easily forget things. When somebody is mad at me I cannot keep it out of my mind." Later he became markedly hypochondriacal; suffered with many imaginary ailments, and worried greatly over these. He was quite a mechanical genius and invented a mail box which was patented and for which he had several offers, but he did not accept them and nothing came of his patent. He worried much over this. In fact, he said, "I studied about this patent so much that at times I was right drunk." At times, he would have violent outbreaks of temper. Occasionally he would be away from home to work, but could not stick to any work for any length of time,

The abnormal tendencies, uncontrolled, finally brought about a mental breakdown.

Prophylaxis:—The family physician knows better than anyone else the skeletons of the family closet—the hysterical, epileptic or insane members of the family, and he also knows the mental characteristics of the child, for he has known him from his birth. Frequently, fortified by this knowledge, if he has that greatest of all gifts—tact—he may, by properly safeguarding the child; prevent that most awful of afflictions, a mental breakdown. The children of neurotic parents and of those with a bad mental heredity should especially have this care. Not only these children, but any child who shows a falling off in his school work should be examined and the cause of this failure, if possible, be ascertained. Frequently, as before stated, mental backwardness is due to adenoids, or to defective sight and hearing. Many a child's life has been made burdensome in school and his preparation for life's work seriously and permanently impaired by these defects which could have been so easily corrected.

Again, if the child is easily tired, irritable, nervous, seclusive, takes no interest in his studies and in the ordinary pursuits of childhood, it is best to take him out of school, for these are the symptoms which frequently lead to precocious dementia. An effort should be made to interest the child in manual work—to teach him to use his hands. A short mental rest might restore him; if it does not, he should not be pushed through school or college, but the family should be satisfied if he can become a wage earner with his hands. In my observation of dementia praecox cases, I am convinced that many have been ruined by pushing them through school or college who might possibly have been safe had the premonitory signs of a mental breakdown been recognized. I do not mean to say that all become insane who have the early symptoms formerly mentioned which so frequently lead to mental breakdown, but so many dementia praecox cases have shown these symptoms that their appearance should always be heeded and their danger recognized.

Puberty is the crucial time in the life of the child. At this time he is born again and every fibre of his being is pulsating with life and vigor. He dreams dreams and sees visions; is moody and broods; restraints are set aside; he is taciturn introspective and self-sufficient; self-esteem and self-criticism are marked. This instability, occurring as it does, coincidentally with school life, is dangerous and the combined demands on the physical and mental strength are frequently so great that a men-

tal breakdown occurs. All children at this period are on thin ice mentally, and the margin between sanity and insanity is perilously small. Normal children pass danger period in safety, without help; but the mentally unstable succumb, especially if a helping hand is not extended, and end their days in an insane hospital, or, if they do not do this, they are able to take only a small part in the world's work. It is especially important at this time that the physician should come into the child's life. The sexual mystery should be explained in order to prevent the vogue surmises—the doubts and fears so prevalent at this time. In speaking of dementia praecox, Dr. Adolph Meyer says, "Among the 25,000 persons who are to-day (1903) in the public and private institutions of New York alone, there are many brilliant hopes buried, largely owing to a lack of knowledge of what some people need in the way of social and personal hygiene. Remember that some of the most illustrious members of the race have been dangerously near the border line of insanity and seem to have great, although they showed obvious traces of the same misled instincts that have completely wrecked others. Should not the home, the press, and the school mind some of these dangers and shape their methods accordingly?" And should not the physician, realizing his responsibility, take his part in this great work—preventive mental hygiene?

In this connection it is especially important to investigate the backward child, for many of these children when they have found themselves and are properly taught become the greatest of men. Patrick Henry is said to have been such a boy. Goldsmith's teacher said that he was the dullest boy she had ever taught. Webster was considered a bullard and Darwin was thought to be "a very ordinary boy and below the common standard in intellect." Of course, the defect in many backward children is permanent, but scientific pedagogy and medicine should give these children every opportunity before they are condemned. A careful physical examination should be made to find out any possible defects which would cause backwardness; then mental tests should be given to ascertain whether the defect is permanent or whether it can be overcome by proper teaching.

And now, in conclusion, let me say that children should first of all be made as nearly bodily perfect as possible, but, at the same time, the guiding and controlling of that body must not be neglected. Introspection and brooding should be discouraged. Self-control and self-reliance should be taught, and especially should they be taught to do things rather than to think of

doing things. The play instinct should be cultivated; games which require decision and action should be played. Let the children rub up against their fellows and thus bring out their defects and find out in what way they excel, for this tends towards a democracy which is greatly to be desired. Not only does play develop children physically, but it develops them mentally, and it is a developer of character.

The child has been neglected in this age of commercialism, when every thought is bent towards the accumulation of money. Herbert Spencer has well expressed the condition when he says, "The raising of a first-rate bullock is an occupation on which men of education willingly devote much time, inquiry and thought—the bringing up of fine human beings is an occupation tacitly voted unworthy of their attention." This is short sighted policy, for "if regeneration is ever to lift us to a higher plane, the adolescent ninus will be its main spring." Therefore, it behooves us to make the child as nearly perfect as possible physically, mentally and morally, for children are the nation's greatest asset and progress must come through them if it comes at all.

Relationship of Syphilis and Tuberculosis—Gouget (Journ. des Praticiens) says, that while tuberculosis does not predispose to syphilis, the latter certainly does to tuberculosis. Although it has been noted that laryngeal or tracheobronchial syphilis has actually resulted in the implantation of the tubercle bacillus, this is not so usual. It is rather the debilitating effects of syphilis which predispose to tuberculosis. Patients in the secondary stage are much more susceptible than old and tertiary syphilitics, unless, indeed, in the latter case there are suppurative lesions, tabes, or general paralysis. Sergent, after careful investigation of the matter, is stated to have come to the conclusion that tuberculosis is intimately bound up with syphilis, although the latter may be only a remote antecedent. Statistics go to show, however, that the influence of syphilis in this connection is less than that of alcoholism. When tuberculosis attacks a syphilitic it does not result in a mixed lesion. Each disease keeps its own proper sphere, and the author quotes cases in which the same lung showed tuberculous nodules at the apex and syphilitic nodes at the base. If the patient is already in an advanced stage of tuberculosis an intercurrent attack of syphilis will hasten the fatal issue. Sergent believes that the engrafting of syphilis upon a tuberculous patient hastens the beneficial tendency to sclerosis. He says that this can only happen in the tertiary

stage, when the patient has already passed through the earlier phases of the disease. Speaking generally, the advent of tuberculosis in the case of a person passing through the secondary stage of syphilis carries with it a bad prognosis, frequently resulting in a galloping consumption. The tendency to sclerosis, however, in later syphilis delays the progress of tuberculosis, and the existence of a high arterial tension in tertiary syphilis is also of favorable import. The treatment of a patient with these two diseases running concurrently raises some important points. The evidence goes to show that treatment by mercury is not, on the whole, contraindicated by the existence of tuberculosis. In this connection the author discourages the giving of mercury per os. He advocates daily injection of a soluble salt of mercury, such as the benzoate or biniodide. The ordinary regional treatment of tuberculosis is also, of course, carried out.

Treatment of Mercury Bichloride Poisoning

The fatal dose of bichloride is usually about 3 grains, and the effects are quite typical. Nausea and vomiting, sometimes of necrotic tissue and blood, are usually the first symptoms, soon to be followed by colicky pains and diarrhea. The kidneys and heart are soon injured, the urine will contain large amounts of albumin, and sudden death may occur from heart failure or uremia, usually after a number of days. The treatment calls for early gastric lavage unless there is fear of perforation. Milk and albumin are recommended, with a view to forming an insoluble compound in the gastro-intestinal tract. It is probable, however, that this compound will also be slowly absorbed. There is thus no real antidote, but the suggestion of W. Meyerstein is a good one and is worth testing. This author found that if colloidal silver is mixed with a solution of bichloride, there will be a rapid and complete precipitation, and the supernatant liquid will be free from mercury, especially if the experiment is conducted at body temperature. A number of animal experiments were conducted and it was found that rabbits, treated first with bichloride and then with collargol, survived longer than those receiving bichloride alone. If a non fatal dose was employed, there was less pronounced albuminuria and fewer toxic symptoms if collargol was also given, particularly if administered several days in succession. Some of these animals were killed and the pathological changes in the kidneys and intestines were much less advanced than in control animals. Further,

experiments demonstrated that the neutralizing effect of colloidal silver is excited only in the intestines and not in the blood stream, for collargol injected intravenously after oral bichloride poisoning had no beneficial influence. It is probable that the bichloride is not all absorbed at once, so that a certain amount will be rendered innocuous by collargol given several days after poisoning and that some of the mercury is also excreted through the gastro-intestinal tract or the bile and then prevented from being re-absorbed, for collargol by mouth will also influence to a certain extent bichloride poisoning by the intravenous route. It is possible that other colloidal metals will have a still better effect.—Muench. med. Woch.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm names of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Salicylates in Rheumatic Affections.—

Voelcker, in a paper on the limitations to the successful employment of salicylates in rheumatic affections, said that it had become a habit to treat all rheumatic affections with the salicylates. Certain of them responded admirably, but there were also quite a number of undoubtedly rheumatic manifestations in which the salicylates proved useless. The most striking benefit of the salicylates was shown in their influence on joint pains, and persistence of pain after adequate administration should always suggest the possibility of the arthritis being gonococcal or septic in nature, or to the pain being due to an anterior poliomyelitis. The pain of acute rheumatic arthritis ought to yield within twenty-four hours to the administration of 10 grains of sodium salicylate with 20 grains of sodium

bicarbonate given every two hours for three doses and then every four hours. Pains about fibrous structures after an acute arthritis were often intractable to salicylates, but yielded to local applications of oil of wintergreen or to potassium iodide internally. The pain of pleurisy and of pericarditis was uninfluenced. Joint effusions when aggravated by movements proved intractable, even when they contained the diplococcus rheumaticus. The pyrexia of acute polyarticular rheumatism was generally controlled within three days, but in the rheumatic state there was often a pyrexia ranging through two degrees, which continued even for weeks, and was unaccompanied by any obvious manifestation of rheumatism. Such pyrexia was often influenced by the salicylates, though it might yield to salol. The employment of the salicylates in rheumatic hyper-pyrexia was waste of valuable time. The cutaneous manifestations of rheumatism were uninfluenced. Neither the various forms of erythema, purpura, nor erythema nodosum appeared to be influenced, and these manifestations had occurred while patients were actually taking the drug. The subcutaneous nodules described by Barlow and Warner were undoubtedly rheumatic in nature, but they were quite uninfluenced by the administration of the salicylates. He had failed to find any successful treatment for them. The similarity of their structure to that of the inflamed valves of the heart in rheumatism, as pointed out by Cheadle, was a powerful argument against the utility of the employment of salicylates in endocarditis or pericarditis. The danger of upsetting the stomach with the irritant salicylates must be borne in mind in the treatment of all heart affections, as also must the risk of acidosis.—Brit. Med. Jour.

Obstetrical Charts in Colors.

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2. Head presentations.
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8. Breech presentations.
9. Mechanism in breech presentations.
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EDWARD C. REGISTER, M. D., EDITOR
CHARLOTTE, N. C.

THE NATIONAL HEALTH BUREAU.

The Silent Partner discusses the proposal to establish a Health Bureau from the standpoint of the laity, and it is interesting to note what are his impressions. The analogy between such legislation and that concerning diseases of animals is not admitted, because there had never been any scientific attempt to study stock hygiene and pathology, while human beings had been studying their own ailments for thousands of years. Also, there are 150,000 doctors in the United States to whom the people can turn for assistance. He says: "Doctors are not a bit better than any other human beings, and there is no certainty that after a national bureau had been created it might not be made the means of getting rid of competition that regular practitioners do not relish." Also: "Think you that the 150,000 doctors in America, thousands of whom are making far less of a living than they would like, would favor something that would decrease the amount of sickness very materially and so make it even harder for them to make a living? I will have to revise my opinion of human nature before I can believe it."

The importance of this lies in the fact that it is fairly representative of the view held by the intelligent laity, that class we have in mind when we echo Burns' wish, to 'see ourselves as others see us.' It is simply unbelievable to these men that the medical profession still clings to the antediluvian theory of its relation with the community transmitted from the pre-Christian temples. Place before the public a proposition suggesting the practical application of preventive medicine, by paying the doctor a fixed fee regardless of service rendered, and see what they will say of it—and of our excuses for not having adopted it a long time ago.

How much of the above-quoted writer's strictures are true? Does any reasonable being among doctors doubt that the establishment of a Bureau, as proposed, will be used to crush out antagonisms and reduce the profession to subjection? Why pretend to doubt this?

Does the physician pull a doleful face and moan over the hard times when there is little sickness—and does he seem bright and hopeful when there is a wide-spread prevalence of some epidemic that keeps him

on the jump and piles up bills receivable? Tell the truth—you know very well that this is so. That it is, is shameful; but we are so used to it that it does not seem so to us. The only excuse—and it is little else—is that we are constantly urging the public to use preventive measures, and when disease comes we can truthfully declare that we gave the warning. But we have gotten so used to having our warnings unheeded, that it is perhaps doubtful if we would give them were we not sure they would not be acted upon. Can we get away from our human nature, our expenses, our needs, our human defects and infirmities? Are we, as a whole class, so vastly superior to the public as our professional standards imply? Can we truthfully make any higher claim for virtue than that we average up with the rest of mankind? Oh, yes! we may expect some lofty 'hifalutin' over this, some indignant outburst of personal abuse against the writer for telling the truth—but we know it is the truth.

We are no worse and little, if any, better as a class than the rest of the people. We are liable to the same temptations and just about as likely to succumb to them. The tradespeople charge us all they can, and rather more than they do others, and we have to find the means of paying our bills. Our wife likes to shine in an Easter bonnet just as much as other women do. We are glad to be busy, and salve our consciences for this by asserting that we did not cause the sickness, and gave due warning of its coming. But we are never so prosperous as when the community is prostrated by an epidemic. When the mourners go about the streets and man is carried to his long home, we think about a trip to Europe and a new automobile. Senator Jones' appendicitis paid for wife's new diamond sunburst. The carpenter's broken leg got Mary's graduation dress and spring outfit. The outbreak of scarlet fever in the mill district sent Billy to college; and the red light district just pays the office rent. Yes, we are very sorry when disease hits our clientele!

Put it the other way, paying us for preventing disease, and the day will soon be here when the doctor will proudly assert that 'there has not been a case of infectious disease among his people for the past year.'

To whom does this apply? The entire medical profession without exception? I do not say so. If anybody knows an exception, a doctor wholly dependent on his profession who really regrets being made busy by an epidemic, let him tell of it. Meanwhile: "Speak for yourself, John."

W.

CURETTAGE AND THE UTERINE CURETTE.

It is unquestionably a fact that curettage of the uterus is a much abused operation, being frequently attempted by incompetent operators and often performed unnecessarily by even trained surgeons. With many, preliminary curettage before laparotomy seems to be almost an obsession; it becomes more than a custom—a habit. The indications for the operation are distinct and it should not be performed unless some definite pathological condition exists that will warrant the traumatism. These may well be limited to abortions and miscarriages, hemorrhage, subinvolution, puerperal infections, new growths within the cavity, senile endometritis, and *chronic* gonorrhoeal endometritis. We would particularly warn against curetting in the presence of an acute or subacute gonorrhoeal infection. Most of the cases of endometritis of a benign character that accompany uterine displacements are due to the associated circulatory disturbance and will clear up when the displacement is corrected. Why such a large proportion of the medical profession deem a curettage necessary in every elective gynecological case in which the pelvis is to be explored, is beyond comprehension, but their practice is evidence that they hold this view. We would also venture the assertion that but comparatively few are capable of curetting properly, and that considerable experience is essential before the technique is mastered, even under the direction of a competent teacher. In short, curettage of the uterus requires at least as much good surgical judgment and technical skill as any other major operation.

We would also call attention to not only the abuse but also the misuse of the sharp uterine curette. Whether the curette shall be sharp, semi-sharp, or dull is still a much mooted question among gynecologists themselves, but we have no hesitation in saying that the sharp instrument is an extremely harmful and dangerous instrument in the hands of the general practitioner. If we recall the anatomical peculiarities of the uterine mucous membrane, that it has but a single layer of glands and that it possesses no submucosa, the argument will be more readily appreciated. It is also well to remember that a complete scraping, without omitting some small areas, is practically impossible, even in the extirpated organ. The uterine surface is scraped to either (1) remove fetal debris, (2) promote contraction of the uterine muscle, (3) remove new growths within the cavity, or (4) remove bacteria and their products. All these ends may be attained equally as well with a semi-sharp as with a sharp instrument, and in

most instances a blunt edge will accomplish all that is desired. If reasonable care is exercised, the semi-sharp curette will express the glandular contents without entirely destroying the glands, will not strip off sections of the endometrium indiscriminately, and will not gouge out sections of the muscle and open new avenues for the transmission of infections. On the contrary, the sharp instrument is more likely to perforate, it destroys areas of the entire thickness of the endometrium, which is followed by scar tissue formation, and even the expert must admit that he cannot determine by the "feel" alone exactly when the musculature is reached. When the muscle is exposed, the lymphatics and blood vessels can absorb infectious material which could otherwise spread by continuity of surface only. We do not think that the statement that there is no excuse for the employment of a sharp uterine curette, except in senile cases where curettage is indicated and the endometrium can no longer perform its functions, is too vehement.

THE NORTH CAROLINA MEDICAL SOCIETY MEETING.

The fifty-ninth annual meeting of the Medical Society of the State of North Carolina met in Hendersonville, June 18-20.

Dr. L. B. Morse, of Hendersonville, chairman of the committee of arrangements, called the society to order, and introduced the preliminary speakers and then presented Dr. A. A. Kent, of Lenoir, President of the Society.

Dr. Kent presided over the meeting in a most business-like manner.

THE PRESIDENT'S ADDRESS.

The President's address was an unusually good one. He made several very valuable suggestions to the society, which will be subsequently adopted. We publish his address in full in this issue of the Journal.

The address of welcome by Dr. Arthur R. Guerard, of Flat Rock, and Mr. Wilcox, of Hendersonville, were especially fine.

Dr. Chas. O'H. Laughinghouse's response to these addresses was very appropriate and well received. Dr. Laughinghouse is naturally an orator and his ability to make a fine speech on almost any subject is well known to his doctor friends throughout the State.

GOVERNOR KITCHEN.

Gov. W. W. Kitchen addressed the association on Wednesday. His address was enthusiastically received by the members of the association, and in his usual attractive style he delivered a most excellent speech. He evidently knows a great deal more about the principles of hygiene and

the value of public health than the most of us. He has thoroughly studied this subject. To have our chief executive of the State in sympathy with the medical profession is one of the society's greatest assets.

THE HOUSE OF DELEGATES.

This important part of the association was well attended, and the interest in it was evident; possibly unusually so. This was brought about on account of certain recommendations made by the President, which was in line with previous suggestions to change certain parts of the by-laws of the association, which mainly dealt with the method of electing officers. A great many physicians seem to want to elect all officers in the general meetings, and a great many seem to want the method of electing officers to remain as it is and as recommended by the American Medical Association. In all probability the prevalent belief was to do away with the nominating committee, and to elect the officers in the House of Delegates at one of its sessions.

The discussions that this matter brought about seemed to be quite friendly. It was evident that every speaker or debater wanted to avoid anything that would cripple the harmony and usefulness of the organization. The exhibition of selfish motives seemed to be conspicuously absent.

THE NOMINATING COMMITTEE.

This committee was certainly very painstaking in its selection of the society's officials, committees and delegates.

The newly elected President, Dr. J. P. Munroe, of Charlotte, was a wise choice. He is a good man, and an experienced physician. He has held many honorable positions and has received many evidences that the medical profession of the State and the general public esteem him.

He is practically the founder of the North Carolina Medical College and now its honored President. He will make a very fine presiding officer at the Morehead City meeting next year, if he doesn't forget to go.

THE SECRETARYSHIP.

Dr. D. A. Stanton, of High Point, who has accomplished so much for the Society as Secretary, resigned at this meeting, and Dr. Jno. A. Ferrell, of Raleigh, was elected to succeed him.

While it was universally regretted that Dr. Stanton insisted upon not being re-elected, the Society is unanimous in the belief that Dr. Ferrell will make one of the best Secretaries that the association has ever had.

As head of the Rockefeller Hookworm Commission of this State, it gives him unusual opportunity to come closely in touch

with the physicians of the State. This will enable him, as we interpret it, to build up the membership of the Society faster than any other man that could have been selected.

It is a position of great responsibility, a great deal of work and very small pay, and if the Society could afford it, the salary of the Secretary should be more than twice what it is now.

During the sessions of the North Carolina Medical Society at Hendersonville the House of Delegates, at the suggestion of Dr. J. Howell Way, of Waynesville, authorized the appointment of a committee whose duty will be to arrange for the painting of the portrait of the late Dr. P. L. Murphy, of Morganton.

It was a graceful and appropriate action and touchingly suggestive of the splendid service rendered North Carolina in the life of Dr. Murphy, whose superb work in founding and placing upon an enduring basis the State Hospital at Morganton marked him a leader in his profession. The portrait will be presented to the State Library at Raleigh and will be a lasting monument to both the professional ability and skill as well as the administrative genius of one who has passed on.

THE PROGRAM.

The following program gives in part the titles of the very valuable papers that were read and discussed before this meeting:

SECTION MATERIA MEDICA AND THERAPEUTICS.

Dr. Wm. S. Jordan, Chairman, Fayetteville.

1. "Causes and Results of Carelessness in Prescribing," by Dr. Wm. S. Jordan, chairman of section, Fayetteville.

Discussed by Dr. Thos. M. Jordan, Raleigh.

2. "A Plea for More Thorough Study of Materia Medica and Therapeutics," by Dr. J. W. Halford, Chalybeate Springs.

3. "Statistics of the Serum Treatment of Typhoid Fever," by Dr. S. Highsmith, Fayetteville.

Discussed by Dr. C. L. Pridgen, Raleigh.

4. "The Treatment of Amebic Dysentery," by Dr. Roscoe D. McMillan, Red Springs.

Discussed by Dr. R. P. Bay, Baltimore, Md., and Dr. Ernest S. Bullock, Wilmington.

5. "The Treatment of Syphilis," by Dr. C. O. Abernethy, Raleigh.

Discussed by Dr. A. J. Crowell, Charlotte.

6. "The Uses of Electricity in Medicine," by Dr. R. L. Pittman, Fayetteville.

Discussed by Dr. J. T. Wright, Salisbury.

7. "Acute Rheumatic Fever with Endocardial Complication and Its Treatment," by Dr. Wm. F. Mitchell, Shelby.

Discussed by Dr. I. W. Faison, Charlotte.

SECTION PEDIATRICS.

Paul H. Ringer, M.D., Asheville, chairman.

Remarks by Dr. Ringer.

1. "The Problem of the School Child," by Dr. Chas. Roberson, Greensboro.

Respondent, Dr. Chas. S. Grayson, High Point.

2. "Amœbic Dysentery in Children," by Dr. J. V. McGougan, Fayetteville.

Respondent, Dr. J. F. Highsmith, Fayetteville.

3. "Adenoids in Infancy," by Dr. Lewis W. Elias, Biltmore.

Respondent, Dr. H. H. Briggs, Asheville.

4. "Influence of Public Health on Pediatrics," by Dr. Chas. O'H. Laughinghouse, Greenville.

Respondent, Dr. W. S. Rankin, Raleigh.

5. "Infant Stools in Health and Disease," by Dr. E. J. Wood, Wilmington.

Respondent, Dr. J. J. Phillips, Tarboro.

SECTION OF PATHOLOGY AND MICROSCOPY.

Dr. Wm. deB. MacNider, chairman.

1. "A Study of the Renal Epithelium in Acute Experimental Nephritis and the Relation Which Exists Between the Epithelial Changes and the Total Output of Urine," by Dr. Wm. deB. MacNider, Chapel Hill.

2. "Angio Neurotic Hemorrhage from the Kidney," by Dr. R. L. Payne, Norfolk, Virginia.

Discussion opened by Dr. Wm. deB. MacNider, Chapel Hill.

3. "Pathology of Pericollitis Membrana and of the Ligamentum Nephrocolicum," by Dr. Addison G. Brenizer, Charlotte.

4. "The Pathology of Amebic Abscess," by Dr. Wm. Allen, Charlotte.

5. "A Report of Five Hundred Cases Treated with Anti-Rabic Virus at the State Laboratory of Hygiene," by Dr. C. A. Shore, Raleigh.

SECTION OF SURGERY.

1. "Surgery as a Last Resort—The Surgeon's Responsibility in Such Cases," by Dr. D. T. Tayloe, Washington, N. C.

Discussed by Dr. R. L. Gibbon, Charlotte.

2. "Hippocrates, Surgeon," by Dr. K. P. B. Bonner, Morehead City.

Discussed by Dr. J. Howell Way, Waynesville.

3. "Diseases of the Kidneys and Their Relation to Surgery," by Dr. J. F. Highsmith, Fayetteville.

Discussed by Dr. F. T. Meriwether, Asheville.

4. "Strangulated Hernia with Report of Cases," by Dr. J. H. Harrill, Snow Hill.

Discussed by Dr. R. O. Dees, Greensboro.

5. "Fright as a Factor in Shock," by Dr. Julian Baker, Tarboro.

Discussed by Dr. J. T. Burrus, High Point.

6. "Congenital Hemangiomas," by Dr. Henry Norris, Rutherfordton.

Discussed by Dr. Jack Nicholson, Washington, N. C.

"Tumors of the Face and Neck," by Dr. E. T. Dickinson, Wilson.

Discussed by Dr. H. T. Bahnson, Winston-Salem; and Dr. C. M. Strong, Charlotte.

8. "The Practical Use of Iodine in the Preparation of the Skin in Operative Cases," by Drs. D. W. and Ernest S. Bullock, Wilmington.

Discussed by Dr. R. L. Payne, Jr., Norfolk, Va.

9. "Drainage of an Infected Knee Joint Without Subsequent Ankylosis," by Dr. Harlan Shoemaker, Shelby.

Discussed by Dr. John A. Williams, Greensboro.

SECTION OF STATE MEDICINE.

Dr. W. S. Rankin, Secretary State Board of Health, chairman.

June 19th, 2:30 p. m.

1. "The Obligations of Citizens to Public Health,"—His Excellency, W. W. Kitchin, Governor of North Carolina.

2. "A National Department of Health: The Provision of the Owen Bill," by Dr. L. B. McBrayer, Health Officer, City of Asheville.

Discussion opened by Dr. Charles O'H. Laughinghouse, Greenville.

3. "The Opposition to a National Department of Health," by Dr. Cyrus Thompson, Jacksonville.

Discussion opened by Dr. John C. Rodman, Washington, N. C.

4. "Ideals and Methods in State Medicine," by Dr. W. S. Rankin, Secretary State Board of Health, Raleigh.

Discussion opened by Dr. J. Howell Way, President State Board of Health, Waynesville.

5. "The Responsibility of the County Medical Society for County Public Health," by Dr. A. Bascom Croom, Maxton.

Discussion opened by Dr. J. Vance McGougan, Fayetteville.

6. "The Medical Profession's Responsibility for the Use of Proprietary and Patent Medicines," by Dr. Lucius N. Glenn, County Superintendent of Health of Gaston County, Gastonia.

Discussion opened by Dr. J. H. Tucker, Charlotte.

7. "Three Decades in Medicine, a Retrospect and a Prophecy," by Dr. J. C. Walton, Richmond, Va.

SECTION PRACTICE OF MEDICINE.

Dr. W. A. McPhaul, chairman, Lumberton.

1. "Tuberculin Dosage, A Further Study of the Value of a Ratio Method of Dosage Increase," by Dr. L. B. Morse, Hendersonville.

Discussion opened by Dr. W. L. Dunn, Asheville.

2. "Field Work in Tuberculosis," by Dr. Mary E. Lapham, Highlands.

3. "The Treatment of Pellagra," by Dr. E. H. Bowling, Durham.

Discussion opened by Dr. Joseph Graham, Durham.

4. "Fallacy of Polypharmacy in the Practice of Medicine," by Dr. Thurman D. Kitchin, Scotland Neck.

5. "Dementia Præcox with Special Reference to the Pre-Dementia Stage," by Dr. Paul V. Anderson, Richmond, Va.

Discussion opened by Dr. R. S. Carroll, Asheville.

6. "The Feeble Minded from a Medical Standpoint," by Dr. Ira M. Hardy, Washington, N. C.

7. "Some Observations on Tumors of the Brain with Report of Cases," by Dr. J. P. Monroe, Charlotte.

8. Dr. R. B. Hayes, Fayetteville, title not given.

9. "The Treatment of Tuberculosis," by Dr. C. A. Julian, Thomasville.

Discussion opened by Dr. M. L. Stevens, Asheville.

10. Dr. H. T. Pope, Lumberton, title not given.

11. "Some Suggestions for the General Practitioner," by Dr. E. G. Moore, Elm City.

12. "The Milk Supply and Preventable Diseases," by Dr. T. A. Mann, Durham.

13. "Foreign Bodies in the Larynx, Trachea and Bronchi," by Dr. A. M. Whisnant, Charlotte.

14. "The Life of the Physician," by Dr. N. B. Adams, Murphy.

SECTION CHEMISTRY AND PHYSIOLOGY.

Dr. R. H. Lafferty, chairman, Charlotte.

1. "The Importance of Chemistry and Physiology to the General Practitioner," by Dr. Robt. H. Lafferty, Charlotte.

2. "Principles of Dietetics and Nutrition," by Dr. I. C. Manning, Chapel Hill.

3. "The Pupil and Its Significance in Pulmonary Diseases," by Dr. C. N. Peeler, Charlotte.

4. "Acidosis," by Dr. Nicholson, Richlands.

5. "Noguchi's Cutaneous Reaction for Syphilis," by Dr. J. W. Squires, Charlotte.

SECTION GYNECOLOGY.

Dr. L. D. Wharton, chairman, Smithfield.

1. "Some Remarks on Cervical Lacerations," by Dr. G. M. Cooper, Clinton.

Discussion by Dr. G. F. Duncan, High Point.

2. "Uterine Hemorrhage Frequently Seen in Pellagra," by Dr. Charles H. Peele, Warrenton.

Discussion by Dr. M. P. Perry, Macon.

3. "Significance of Leucorrhea," by Dr. A. H. Rose, Smithfield.

Discussion by Dr. Geo. D. Vick, Selma.

4. "The Nervous Phenomena of Pelvic Diseases," by Dr. W. Hopton Smith, Goldsboro.

Discussion by Dr. H. G. Turner, Raleigh.

5. "Some Reflex Disturbances Resulting from Uterine Displacements; the Diagnosis and Treatment. Report of Case," by Dr. T. Marshall West, Fayetteville.

Discussion by Dr. Hubert A. Royster, Raleigh.

SECTION OBSTETRICS.

Dr. J. W. Neal, chairman, Monroe.

1. "Better Obstetrics," by Dr. J. W. Neal, Monroe.

2. "An Interesting Case of Hyperemesis Gravidarum," by Dr. Albert D. Parrott, Kinston.

3. "Notes from a General Practitioner's Records," by Dr. J. R. Paddison, Oak Ridge.

4. "Caesarean Section," by Dr. J. T. Burrus, High Point.

5. "Placenta Previa," by Dr. Sam A. Glenn, Monroe.

6. "The Frequency of Appendicitis During Pregnancy; Necessity for Operation. Report of Case," by Dr. John Q. Myers, Charlotte.

7. "Essentials in the Successful Practice of Obstetrics," by Dr. G. L. Brown, Hendersonville.

8. "Obstetric Antisepsis," by Dr. R. L. Payne, Monroe.

9. Dr. J. L. Egerton, Hendersonville, subject to be announced.

10. Dr. M. Adams, Statesville, subject to be announced.

11. "Report of a Case of Appendicitis Complicating Pregnancy, Labor and Puerperium," by Dr. H. McKee Tucker, Raleigh.

RAILWAY SURGERY.

Dr. W. C. Bostic, chairman, Forest City.

1. "Field Surgery," by Dr. W. C. Bostic.

2. Dr. J. R. Rodgers, Raleigh. Subject not announced.

3. Dr. J. Harrison, Jr., London, Tenn. Subject not announced.

The Society greatly appreciates the many courtesies shown its members by the people of Hendersonville. The local physicians and the citizens succeeded in pleasing the visitors.

The automobile and carriage rides to Kanauga and Flat Rock were particularly enjoyed.

The smoker Wednesday evening was a great success, and the complimentary references to it seemed to be quite numerous.

We shall always bear testimony that the Hendersonville meeting was one of the very best that has been held within the last twenty-five years.

NEW OFFICERS.

The officers elected for the ensuing year are as follows:

President, Dr. J. P. Munroe, Charlotte; vice-presidents, Dr. F. R. Harris, Henderson; Dr. E. S. Bullock, Wilmington; Dr. L. B. Morse, Hendersonville.

Orator for 1913, Dr. H. D. Stewart, Monroe; essayist, Dr. Jno. T. Burrus, High Point; leader of debate, Dr. J. H. Harper, Snow Hill.

The Society will hold its next annual meeting in Morehead City next June.

NORTH CAROLINA STATE HEALTH OFFICER'S ASSOCIATION MEETING, HENDERSONVILLE, JUNE 17, 1912.

This meeting was called to order by President L. B. McBrayer, of Asheville, and most cordially welcomed by an address from Dr. J. S. Brown, of Hendersonville. Response was made by Dr. D. C. Absher, of Mt. Airy.

The president's address was next on the program and proved well up to the usual high standard of Dr. McBrayer's literary efforts. This address was full with facts and logic and gave much inspiration to those present. Reports of officers revealed the fact that although the organization was only one year old, it had done much good work.

Perhaps the most interesting part of the meeting was next when the counties were called alphabetically and brief reports made by the health officers or representatives of each county. Most of the counties were heard from and many excellent ideas advanced as to methods of doing the county work. Papers were read as follows:

"The Opportunity of County Health Work," by Dr. G. F. Ross, of Guilford; "The Whole-Time County Health Officer,"

by Dr. J. Howell Way, of Waynesville; "What the Rockefeller Sanitary Commission Can Do to Build Up County Health Work," by Dr. J. A. Ferrell, of Raleigh; "The Advantage of Combining Town and County Health Work," by Dr. John Bynum, of Winston; "How to Bring Indictments for Violation of Health Laws," by Hon. R. R. Williams, of Asheville; "Methods for Securing the Co-operation of the Public in Health Work," by Dr. T. M. Jordan, of Raleigh; "Education and Public Health," by Hon. J. Y. Joyner, of Raleigh; "What the County Superintendents of Schools Can Do for the Public Health," by Prof. A. C. Reynolds, of Asheville; "The Relation of the Church to Public Health," by W. L. Poteat, LL.D., of Wake Forest.

These papers were of a high order and will be published with the annual transactions.

From the laity, Mr. Williams' address was excellent and gave a very interesting view of the work from a legal standpoint, while Prof. Joyner gave us much encouragement through the medium of the public schools of the State. Election of officers for the ensuing year resulted in the unanimous election of Dr. L. N. Glenn, Superintendent of Health of Gaston county, for President; Dr. G. M. Cooper, of Clinton, vice-president; and Dr. W. S. Rankin, of Raleigh, secretary-treasurer.

This young but strong association bids fair to do some most important work during the next year. It is hoped to have a large increase in membership and to make itself felt as a factor in the great move for better health and sanitation that is now so active everywhere. Never in the history of the State has there been so much interest in public health work and the recent work done in the State has been only a proof that we have a better future in this good State.

NORTH CAROLINA STATE MEDICAL EXAMINING BOARD.

The Medical Examining Board of the State of North Carolina held its annual meeting in Hendersonville on June 11, 12, 13, and 14. There were one hundred and twenty-eight physicians who received license to practice medicine in this State.

The following were passed by the examining board by reciprocity—that is, given license to practice in North Carolina on license granted in other States:

John M. Steward, Washington, D. C.; Robert A. Schoonover, Greensboro; E. C. Morris, Asheville; Charles H. Cocke, Asheville; Philip R. Perry, Asheville; James M. Lynch, Asheville; J. W. McMahan, Crestmont; J. W. Huston, Asheville; W. G. Bandy, Maiden; J. H. Hunter, Spartan-

burg, S. C.; M. R. Glenn, Asheville; J. W. Hooper, Wilmington; John De W. Schonwald, Wilmington; W. L. McManus, Parmalee; Fred Thompson, Orleans, Mass.; Thos. N. Jeffries, North Wilkesboro; May Waite, Chattanooga, Tenn.; J. O. McClelland, Maxton; S. P. Harris, Highland.

The following successfully stood the Board's examination:

R. K. Adams, Monroe; G. C. Battle, Rocky Mount; G. C. Beard, Cedar Creek; R. S. Bean, Rutherfordton; M. H. Brawley, Mooresville; T. E. Buchanan, Concord; H. A. Bullock, Bullock; G. W. Bullock, Penelo; N. B. Camnady, Oxford; J. E. Caine, Tarboro; C. E. Cheek, Connelly Springs; S. S. Coe, Greensboro; J. D. Cochrane, Statesville; W. A. Coleman, Salisbury; H. H. Creft, Raleigh; P. E. Craig, Waxhaw; R. L. Daniels, Oriental; J. F. Davis, Glendon; E. A. Erwin, Pineville, B. P. Fields, Greensboro; F. H. Garriss, Windsor; J. S. Gambill, North Wilkesboro; F. B. Garret, Rockingham; P. V. Good, Rutherford College; Charles T. Grier, Matthews; P. A. Griffin, Clayton; L. Hannah, Atlanta, Ga.; W. P. Hardee, Stem, N. C.; William Hartee, Wilmington; F. L. Herbert, Andrews; G. F. Highsmith, Dunn; Eddie Hollingsworth, Roseboro; Milford Himmant, Selma; P. E. Hughes, Raleigh; S. S. Irwin, Mt. Airy; W. C. Johnson, Canton; J. P. Jones, Franklin; J. W. Kay, Weldon; George F. Leonard, Lexington; B. E. Little, Statesville; Everett A. Livingston, Gibson; Glenn Long, Catawba; J. T. Mann, High Point; R. E. Martin, East Bend; R. F. Mauser, Hickory; H. B. Moseley, Norfolk, Va.; C. R. McAdams, Siler City; O. L. McFadden, Fayetteville; B. J. McGoogan, Reinerd; Miss G. M. McKnight, Charlotte; C. R. Nicholson, Hamptonville; Horace Palmer, Warrenton; Reid Patterson, Statesville; C. C. Phillips, Winston; S. W. Rankin, Concord; M. B. Rayner, Concord; Mike Roberson, Durham; H. C. Roberts, Coats; R. H. Rowe, Newton; J. H. Roselle, Charlotte; R. C. Sadler, Charlotte; L. R. Salmon, Hamptonville; R. B. Seem, Wilmington; S. P. Sebastian, Greensboro; C. F. Sink, North Wilkesboro; E. A. Sherrill, Statesville; A. J. Smith, Kenly; J. F. Stevens, Norfolk, Va.; W. D. Stedwick, Durham; B. B. Sturdivant, Marshville; F. O. Swindell, Dunhaven; W. C. Terry, Hamlet; J. F. Terry, Lexington; M. L. Townsend, North Wilkesboro; S. W. L. Tydeman, Charlotte; R. S. Vass, Raleigh; R. L. Wall, Wallburg; D. D. Walker, Warsaw; O. W. Ward, Glidden; B. E. Washburn, Bostic; T. B. Weatherly, Gorman; M. M. West, Raleigh; Miss Margaret Whiteside, Richburg, S. C.; R. B. Whittaker, Kinston; E. Wilder, Hayesville, Frank Wrenn, Siler City.

North Carolina State Board Examination Questions.

SURGERY.

By Dr. John C. Rodman, Washington, N. C.

1. (a) What is the operation of suprapubic cystotomy? (b) Describe its operative technique. (c) For what reasons is it resorted to?

2. Describe briefly two methods of end to end intestinal anastomosis, giving the names of authors.

3. (a) Name the different varieties of abdominal hernias. (b) Describe briefly the Bassini operation for Inguinal hernia.

4. Give linear and muscular guide for ligation of anterior tibial artery, at its middle third.

5. How would you treat a fracture of the middle third of the femur?

6. Differentiate clinically between benign and malignant tumors.

7. Describe Chopart's amputation, and through what joint is it made?

8. (a) How would you treat a carbuncle? (b) What is the infecting organism?

PHYSIOLOGY AND HYGIENE.

By Benj. K. Hays, M.D., Oxford, N. C.

1. Give types (anatomical) of glands, and name one of each type.

2. Give nerves of special sense (not of feeling).

(3) Name the roots of the fifth cranial nerve with regard to both size and function. Name chief ganglion, and state which root it is on. Give branches arising from ganglion (not subdivisions). What becomes of the root that does not enter ganglion? (This entire question may be answered by a diagram).

4. What is the difference between inspired and expired air? How is oxygen carried in blood? Give chemical name of molecule containing oxygen.

5. Name ductless glands, and where pathologic conditions are supposed to arise from disorders of same, name them.

6. Name six enzymes. Where found. Action.

7. State (very briefly) the chief functions of blood.

8. What disease would be more especially feared in drinking water containing colon bacilli? Why?

Pledge.

MATERIA MEDICA AND THERAPEUTICS.

By John Bynum, M.D., Winston-Salem.

1. Explain the distinction between physiologic action and the therapeutic use of medicinal agents.

2. What are the therapeutic uses of nitro-

glycerin? And why valuable when administered in connection with digitalis?

3. Why should you prescribe the salts of the alkaloids instead of the alkaloids themselves?

4. Give classification, action, dose, dangers and indications for use of pilocarpin.

5. Give the action, dose, dangers, uses and contraindications of digitalis.

6. Give the action and uses of one of the preparations of calcium used in medicine.

7. Give dose, action, uses and dangers of phenyl salicylate.

8. What are the contraindications to the use of quinin?

9. Write two prescriptions for each of the following: Uremia, chronic lead poisoning, and scabies. Write without abbreviation.

10. Give the physiologic action of oleum ricini.

ANATOMY.

By Dr. W. W. McKenzie, Salisbury.

1. Describe the clavicle.

2. Name the articulation of the superior maxillary bone.

3. Name the muscles of the shoulder and give the origin and insertion and nerve supply of the pectoralis minor.

4. Describe the sacral plexus and name its branches.

5. Mention the branches of the internal iliac artery.

6. Name the component parts of the spermatic cord.

7. Describe the vagina.

8. Describe the tracheæ.

9. What pathologic changes occur in caries.

10. Distinguish between fatty degeneration and fatty infiltration of kidney.

Answer only eight questions.

GYNAECOLOGY AND OBSTETRICS.

By L. B. McBrayer, M.D., Asheville.

1. (a) What is the most frequent cause of laceration of the cervix? (b) Name some diseases resulting from unrepaired lacerated cervix. (c) Describe operation of trachelorrhaphy.

2. (a) Give cause, symptoms and treatment of ophthalmia neonatorum. (b) Describe the prophylactic treatment; when should it be used?

3. (a) Describe operation of curettage. (b) Mention two or three indications for its use. (c) Mention the dangers of the operation. (d) In what particular infection in the puerperium is curettage contraindicated?

4. (a) Mention two serious conditions of pregnancy supposed to be due to auto-

toxemia. (b) Mention the internal organs whose cell injury or disturbed functions are important factors in the conditions. (c) Give the general plan of treatment best suited to meet these abnormal conditions.

5. (a) Mention some of the causes of cystocele in the female. (b) Describe briefly the treatment.

6. (a) What are the indications for Cæsarean section? (b) Give briefly the essential steps in the abdominal operation.

PRACTICE OF MEDICINE.

By Dr. H. H. Dodson, Greensboro.

1. What is the significance of the apex beat? What relation has it to systole? How would you determine whether a murmur is systolic or diastolic in origin?

2. Give the indications for digitalis in lesions of the heart. Give the diseases of the heart in which digitalis is contraindicated.

3. Name the important diseases in which the blood picture aids materially or verifies the diagnosis. Under what conditions would you get an increased (a) leucocyte count; (b) red blood count.

4. How would you treat phlebitis of the femoral vein complicating typhoid fever? b. If embolus is swept into blood stream, where would it most likely lodge, and through what channels would it travel?

5. Give briefly the pathology of bronchopneumonia. Give differential diagnoses between broncho-pneumonia and croupous pneumonia. (Lobar.)

6. Give the physical signs of cavity of the lung. Give physical signs and causes of emphysema of the lungs.

7. Differentiate hæmaturia of renal origin from hæmaturia of cystic origin. Give causes of each.

8. Give urinary findings in acute nephritis. How would digitalis, caffeine and alkaline diuretics act in this condition, and why would you not use them? Give the proper treatment.

9. Give the clinical manifestations in the extremities produced by (a) diseases of the motor cells of the anterior horn; (b) diseases of the central motor tract.

10. What are the indications for lavage? Under what conditions would it be contraindicated? What is the significance of bile in the gastric contents? blood in the gastric contents?

Sign pledge.

Answer eight questions only.

CHEMISTRY AND DISEASES OF CHILDREN.

By J. L. Nicholson, M.D., Richland.

1. Complete the following equations, and write, under its proper formulæ, the names

of each resulting chemical compound:

CCl_3COH plus KOH equals

NaCl plus H_2SO_4 equals

2. Give the names and the formulæ of three chemical substances in common use as disinfectants, and briefly survey their use and application, in the prevention of communicable diseases.

3. Mention four important chemical processes constantly occurring in the living body, and cite an instance of each process.

4. Name the principal organic constituents of urine, and explain their respective metabolic significance.

5. Tell how we may determine the functioning capacity of the kidneys, and the practical value of the knowledge so gained.

6. Point out the chemical relationships of the larger groups of organic compounds.

7. State the period of incubation and communicability of:

1—Scarlet fever.

2—Measles.

3—Rubella.

4—Varicella.

5—Pertussis.

6—Mumps.

7—Diphtheria.

8. Name the bacteria chiefly concerned in the production of the toxæmia of bacillary dysentery; and discuss, from a dietary viewpoint, the principles involved in its treatment for the purpose of so affecting bacterial metabolism, as to modify or inhibit their toxic products.

9. Set forth concisely the present status of our knowledge of acute poliomyelitis.

10. Discuss the definite clinical syndrome known as milk nutritional disorder, presenting 1st, the cause and nature of the disturbance; 2nd, its symptoms, and 3rd, its treatment.

It will be of interest to note that two members of this year's graduating class at the Woman's Medical College of Pennsylvania were Southern ladies, Miss Whiteside, of South Carolina, and Miss Mims, of Louisiana.

Dr. Julius Alexander Caldwell, of Salisbury, N. C., and Miss Ethel Florence Millard, of Rochester, N. Y., were married on June the 8th.

Dr. Caldwell graduated from the Medical Department of Johns Hopkins University in 1904.

He is a young physician of rare professional ability.

Dr. George R. Patrick, one of Gaston county's most prominent citizens and a member of a well known family, died June

the 19th at his home about six miles south of Gastonia, N. C. Paralysis was the immediate cause of his death.

Dr. Patrick was 57 years of age. He was graduated in medicine from the University of Maryland in 1879, and later located in Gaston county, near Union church, for the practice of medicine. He was a brilliant man and easily took first rank in his profession.

BOOK NOTICES.

Neurasthenia Sexualis. A Treatise on Sexual Impotence in Men and in Women. For Physicians and Students of Medicine. By Bernard S. Talmey, M.D., Former Pathologist to the Mothers' and Babies' Hospital, and Gynecologist to the Yorkville Hospital. With nineteen drawings in the text.

This work is divided into seven parts as follows: Part I, Anatomy; Part II, Physiology; Part III, Psychology of Sex; Part IV, Etiology of Impotence; Part V, Pathology of Impotence; Part VI, Treatment of Impotence; Part VII, Hygiene of Impotence.

The volume contains 196 pages of carefully indexed reading matter, and we are glad of the privilege of placing this book before our readers.

The Healthy Baby. The Care and Feeding of Infants in Sickness and in Health. By Roger H. Demmett, M.D., Instructor in Diseases of Children in the New York Post-Graduate Medical School; Assistant Attending Physician to the Babies' Wards in the New York Post-Graduate Hospital; Chief of Clinic in the Post-Graduate Dispensary for Children; Fellow of the New York Academy of Medicine. New York: The MacMillan Company. 1912.

This is one of the most interesting and valuable works on this subject that we have had the pleasure of reviewing for a long time. The author evidently understands his subject, and gives in a concise and clear manner, many useful suggestions to physicians and to mothers.

We are glad to have the privilege of recommending it to our readers. The book is attractively bound, and its price is only \$1.00.

Report From the Pathological Department and the Department of Clinical Psychiatry of Central Indiana Hospital for the Insane, 1909-1910 and 1910-1911. Vol. IV. Indianapolis: Wm. B. Burford, Contractor for State Printing and Binding. 1912.

The contents of this volume follows:
1. Abstract from the annual report of the

Board of Trustees to the Governor. 2. Statement of George F. Edenharter, M.D., Superintendent, to the Board of Trustees. 3. Statement of George F. Edenharter, M.D., Superintendent, to the General Practitioners of Indiana. 4. Summary of a Year's Work in the Department of Clinical Psychiatry, by Max A. Bahr, M.D., (1909-1910). 5. Summary of a Year's Work in the Department of Clinical Psychiatry, by Max A. Bahr, M.D., (1910-1911). 6. Summary of Two Year's Work in the Department of Pathology, by E. D. Martin, M.D., (1909-1910 and 1910-1911). 7. Papers Read and Published. 8. Index.

The volume is neatly bound, and it gives in a minute form the character of the work done in this well-known institution.

Salvarsan in Syphilis and Allied Diseases.

By J. E. R. McDonagh, F.R.C.S., Surgeon to Out-Patients, London Dock Hospitals. London: Henry Frowde, Oxford University Press; Hodder & Stoughton, Warwick Square, E. C. 1912.

The subjects for which this volume was published were:

(1) To describe salvarsan and relate its history and that of its forerunners.

(2) To explain the methods of its injection.

(3) To estimate its potency as a specific against the *spirochæte pallida*.

(4) To state with impartiality what it does do and what it does not do; what are its uses and what its abuses.

(5) To demonstrate these facts by actual cases cited as evidence, and thus to arrive at an accurate estimate of its value.

The work is quite complete and the author has dealt with his subject in a most honest and painstaking manner.

The book is well bound and the illustrations show careful study and consideration. The one hundred and fifty pages of reading matter is conveniently indexed.

Transactions of the American Pediatric Society. Twenty-third session held at the Lake Mohawk Mountain House, Lake Mohawk, N. Y., May 30 to June 2, 1911. Edited by Linnaeus Edford La Petra, M.D. Volume XXIII.

This volume of transactions shows the marvelous work this society is doing, and the articles contained therein are of unusual value, and the manner in which the transactions are gotten up reflects credit upon the officers of the association.

The binding is neat and attractive. The illustrations are above the ordinary and are in every way indicative of careful selection.

The volume contains 388 pages of reading matter.

Progressive Medicine. Volume II. June, 1912. Lea & Febiger, Philadelphia and New York. 1912.

This is a quarterly digest of advances, discoveries and improvements in the medical and surgical sciences, edited by Hobart Amory Hare, M.D., assisted by Leighton F. Appleman, M.D.

This volume contains articles on the following subjects: Hernia—Surgery of the Abdomen, Exclusive of Hernia—Gynecology—Diseases of the Blood. Diathetic and Metabolic Diseases. Diseases of the Spleen, Thyroid Gland, Nutrition, and the Lymphatic System—Ophthalmology.

These articles were prepared by Drs. John Clark, William B. Coley, John C. A. Gerster, Edward Jackson, and Alfred Stengel. These subjects are thoroughly discussed, and are thoroughly up-to-date in every respect.

Transactions of the North Carolina Association for the Prevention of Tuberculosis held at Raleigh, N.C., January 31st, 1911. Richard H. Lewis, M.D., President, Raleigh, N. C., Chas. A. Julian, M.D., Secretary and Treasurer, Thomasville, N. C. Edited for the Association by Chas. A. Julian, M.D. Raleigh: Edwards & Broughton Printing Co., State Printers and Binders. 1911.

This issue of the transactions of the seventh annual session of this association contains many very valuable articles, which were presented before this meeting. The discussions are also included in this volume, and they are quite interesting.

The book is neatly bound and is very attractive in its appearance.

Minor and Emergency Surgery. By Walter T. Dammreuther, M.D., Surgeon to St. Elizabeth's Hospital and to St. Bartholomew's Clinic, New York City. 12mo volume of 226 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1911. Cloth, \$1.25 net.

Many books on minor surgery have been written, but this is the first one to be adapted exclusively to the needs of the hospital interne.

This volume has been prepared for the exclusive use of the members of a resident hospital staff; for the interne's guidance when acting independently; to assist the ambulance surgeon in emergencies; to simplify practical work for the junior and to aid the senior in some of his predicaments.

An effort has been made to particularly emphasize those points that are of great importance in practical work, but which are often apparently disregarded or ignored.

The author assumes that the reader pos-

sesses the average theoretical knowledge of the medical graduate, but has had little or no practical experience, and therefore he has endeavored to make his statements as simple, clear and concise as possible.

The book contains chapters on the following subjects: The Ambulance Surgeon; Accidental Wounds; Traumatic Injuries of Joints; Simple Fractures; Compound Fractures and Traumatic Amputations; Sequelæ of Fractures; Acute Pyogenic Infections; Effects of Intense Heat and Cold; Ulcers—Bed sores; Foreign Bodies; Surgical Shock and Collapse—Death; Minor Operations.

This work will be of great value to hospital internes, and also to the general practitioner.

We take great pleasure in recommending it to our readers. The volume contains 226 pages of reading matter, and the illustrations are well chosen, and carefully arranged.

Laboratory Methods. With Special Reference to the Needs of the General Practitioner. By B. G. R. Williams, M.D., Member of Illinois State Medical Society, American Medical Association, Etc. Assisted by E. G. C. Williams, M.D., formerly Pathologist of Northern Michigan Hospital for the Insane, Traverse City, Michigan. With an introduction by Victor C. Vaughan, M.D., LL.D., Professor of Hygiene and Physiological Chemistry and Dean of the Department of Medicine and Surgery, University of Michigan, Ann Arbor, Michigan. Illustrated with forty-three engravings. St. Louis: C. V. Mosby Co. 1912.

A realization of the fact that the general practitioner is not usually prepared to make, on account of lack of extensive apparatus and other conveniences, elaborate chemical tests and examinations, has prompted the authors to prepare this book.

It has been the aim of the authors to simplify methods both as to apparatus and technic. Essential factors have not, however, been omitted, but have been emphasized in such manner as to indicate their importance.

The general make-up of this volume is attractive and the book is worth several times its price, which is \$2.00.

Manual of Surgery. By Alexis Thomson, F.R.C.S., Ed., Professor of Surgery, University of Edinburgh; Surgeon Edinburgh Royal Infirmary, and Alexander Mills, F.R.C.S., Ed., Surgeon Edinburgh Royal Infirmary. Volume III. Operative Surgery, with 220 illustrations. Edinburgh, Glasgow, and London: Henry Frowde, and Hodder and Stoughton. 1912.

The following topics are thoroughly discussed in this volume: Operations on Blood Vessels—General; Ligation of Arteries at Root of Neck; Ligation of Arteries of Upper Extremity; Ligation of the Arteries of the Abdomen and Lower Extremity; Operations on Veins; Operations on Nerves; Operations on the Cranial Nerves; Operations on Spinal Nerves; Operations on the Bones; Operations on Tendons; Operations on Joints; Amputations; Amputations of the Lower Extremity; Amputations of the Upper Extremity; Operations on the Skull and Brain; Operations on the Spine and Cord; Operations on the Face; Operations on the Pharynx and Esophagus; Operations on the Jaws; Operations on the Tongue and Salivary Glands; Operations on the Neck; Operations on the Goitre; Operations on the Air Passages; Operations on the Breast; Operations on the Chest; The Technique of Abdominal Surgery; Operations on the Vermiform Appendix; Operations on the Stomach; Operations on the Intestines; Operations for Hernia; Operations on the Rectum; Operations on the Liver; Operations on the Gall-Bladder and Bile Ducts; Operations on the Pancreas; Operations on the Spleen; Operations on the Kidney and Ureter; Operations on the Bladder and Urethra; Operations on the Male Genital Organs; Anaesthetics.

The volume contains 565 pages, and the work is in every sense up-to-date.

Stomatology In General Practice. A Text-Book of Diseases of the Teeth and Mouth for Students and Practitioners. By H. P. Pickerill, M.D., Ch. B., M.D.S. (Birm.), L.D.S. (Eng.), Hon. Stomatologist to the General Hospital, Dunedin, Professor of Dentistry and Director of the Dental School in the University of Otago; Hon. Consulting Dental Surgeon to the Pleasant Valley Sanatorium. London: Henry Frowde, Oxford University Press, Hodder & Stoughton, Warwick Square, E. C. 1912.

This volume contains chapters entitled as follows: The Development, Anatomy, and Physiology of the Teeth and Adjacent Structures; Deformities of the Teeth and Jaws; Inflammatory Conditions of the Mouth; Gingivitis—Dental Arthritis; Caries of the Teeth; The Preventive Treatment of Dental Caries; The Surgical Treatment of Dental Disease; Fractures and Dislocations of the Jaw; Closure of the Jaws; Oral Tumors; The Manifestations of Systemic Diseases in the Mouth; Oral Sepsis and its Effects; The Relationship of Oral Disease to Various Lesions of the Nervous System; Local and General Anaesthesia; Method of Examining the Mouth; Formulae; Dental Instruments.

These subjects are thoroughly developed, and the illustrations, the most of which are original, are very good indeed.

We take pleasure in recommending this book to our readers.

Text-Book for Nurses. Anatomy, Physiology, Surgery and Medicine. By E. W. Hey Graves, M.S., F.R.C.S., Assistant Surgeon, Bristol General Hospital; Clinical Lecturer, University of Bristol, and J. M. Fortesene-Brickdale, M.A., M.D., Assistant Physician, British Royal Infirmary; Clinical Lecturer, University of Bristol. London: Henry Frowde, Oxford University Press; Hodder & Stoughton, Warwick Square, E. C. 1912.

This work is divided into three parts as follows: Part I, Anatomy and Physiology; Part II, Surgery; Part III, Medicine. The authors have put these subjects into a concise form, and in a manner easily understood by the nursing profession. We know of no book more suitable for the needs of the average nurse than this one. It is in every way practical and useful.

The volume contains 407 pages of reading matter, and many fine illustrations.

International Clinics. Volume II, Twenty-second Series, 1912. Philadelphia and London: J. B. Lippincott Co. 1912.

This is a quarterly of illustrated clinical lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pædiatrics, Obstetrics, Gynecology, Orthopædics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to students and practitioners by leading members of the medical profession throughout the world.

The articles in this volume appear to be unusually good, and this issue will be of real value to the medical profession.

Good Things in the July Lippincott's.

Lippincott's has no problems to solve, no continued stories to hinder, and it appeals to you just when you most want it—all of which helps to explain the reason for its fifty-some years of continued popularity. In particular is the July issue of the right sort, every page breathing a spirit in harmony with recreation days.

The never-failing complete novel is a diverting one from H. de Vere Stacpoole, who wrote "The Blue Lagoon," "The Crimson Azaleas," and other books of pleasing memory. His new story, "Molly Beamish," deals with high life in England a century or more ago. In color, in life, in daintiness, and in charm it can be compared only with "Beaucaire"—and it does not

suffer in the comparison. "Molly" is the adorable daughter of a poverty-stricken but devil-may-care Irish knight, hard put to it to maintain his position in society. In their trouble they are flouted by the rural aristocracy of the place where they are stopping, but Molly is spunky and carefully presents to them several Rolands for each of their Olivers. Yet the odds are fearfully against the girl, and it looks as if she were going to be ignominiously routed, when—well, something happens. It would be a shame to explain here what that something is, and thus give away the clever plot prematurely.

The short-stories in the number are as varied in theme as they are entertaining in motive. "At Highest Tide," by Clinton Dangerfield, is a story of the great Mississippi floods. "The Foolish Books," by Owen Oliver, tells of an amusing but unusual love affair on an ocean liner. Others of note are "Tares and Wheat at the Vicarage," by Mary Davoren Chambers; "In the Admiral's Cabin," by Robert J. Pearsall; "Gloria Peace, the Riddle," by Augusta Kortrecht; and "A Name to Conjure with," by Sarah Chichester Page. There is also a translated "Short Story Masterpiece"—one of a series: "Juggler to Our Lady," by Anatole France, with an introduction by the editor.

A patriotic paper of importance is "The Poet of the Flag," by La Salle Corbell Pickett. The poet is of course Francis Scott Key, and the story of his life and how he wrote "The Star-Spangled Banner" amid the din of battle makes thrilling reading. The third and last of Hubert Bruce Fuller's extraordinary series of articles on "How Congress Squanders Our Money" has to do with "Our Rapidly Increasing Appropriations and Their Remedy." Shorter papers are "The Tyranny of Speed," by Kate Masterson; "False Realism," by Herman Scheffauer; "The Panama Canal," by George L. Knapp; "Woman's Foot," by Bessie L. Putnam; and "Junboism," by W. B. Blake. Edward Sherwood Meade's financial article this month is on "Industrial Bonds."

Among the poems is a beautiful one entitled "The Band of the 'Titanic,'" by Florence Earle Coates. The other verses are pleasing and seasonable, and "Walnuts and Wine" is as laughable as ever. "Twentieth-Century Travel," full of timely hints to the motorists, is conducted by Churchill Williams. There is also some interesting miscellany.

Summer Ailments

involving the gastro-intestinal tract or the circulatory system, are especially amenable to

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The American Review of Reviews.

CONTENTS FOR JULY, 1912.

THE PROGRESS OF THE WORLD.

Competing for the World's Greatest Office; An Extended Political Season; The Progressive Republicans; Taft and Roosevelt Before the People; The Climax in Ohio; "Obtuseness" in an Acute Period; Offending the Public Conscience; New Jersey Follows Ohio; Trying to Work Both Systems; South Dakota—a Typical Verdict; Iowa in a Conclusive Test; "Lafe" Young with the Progressives; A Glance Over Republican Territory; A Party Facing Life or Death; The Line-Up at Chicago; Motives of the Leaders; The "System" in the Party; The "Contests" at Chicago; The Gains of this Political Year; As to Second Terms; The Olympic Games; Amherst's New President; Rural Education in the South; The Minimum Wage in Massachusetts; Germany on the Sea; Is It to be a Third Intervention in Cuba?; Gomez and the Revolt; Supervising the Panama Election; "Valorizing" Coffee; Is There a "Coffee Trust"?; Alert British Labor; Political Strikes in Europe; Electoral Reform in Belgium; The School and the Church; The Belgium Election; Electoral Inconsistencies in Hungary; France's Task in Morocco; The International "Game"; Subterranean Politics; Backdoor Negotiations; Stealing State Documents; The Lessons Therefrom; The New Woman of the East; New Australian Capital; The Australian Census; Dr. Buckley Retires; Interesting Little Royalties.

With portraits, cartoons and other illustrations.

Record of Current Events. With portraits. Cartoons of the Month.

The New Methodist Bishops. By Ferdinand Cowle Iglehart. With portraits.

Wilbur Wright (portrait).

The Political Situation in Cuba. With portraits, map and other illustrations.

Big Business and the Citizen—II. By Holland Thompson. With tables.

What the West Expects from Panama. By Agnes C. Laut.

Need of a Tariff Board, or Commission. By Albert G. Robinson.

How the British Post Office Grew. With portrait of Herbert Louis Samuel.

The Dramatic Museum at Columbia. By Dudley H. Miles. With illustrations.

The New Woman of China and Japan. By Adachi Kinnosuke. With portraits.

Woman's Part in India's Social Advance. By Basanta Koomar Roy. With portraits.

Japan's Task in Korea. By David Starr Jordan.

Making a New Constitution for Ohio. By Henry W. Elson.

Leading Articles of the Month. With portraits, map and other illustrations.

Mazzini, Crispi, and Italy as a World Power. With portraits.

Books of the Month. With portrait of Henry D. Lloyd.

Financial News for the Investor.

Miscellaneous.**Reconstruction Following Typhoid Fever.**

In some instances, the convalescence of typhoid fever presents a debility closely akin to a tuberculous predisposition, which indicates the need for more potent reconstructives than the stomachics and tonics usually employed for this purpose. This need is well met by Cord. Ext. Morrhuæ Comp. (Hagee). Usually in these cases the blood stream is thin, the processes of metabolism are interfered with and the vital powers remain far below par. The tissues are easily susceptible to graver infections, such as tuberculosis. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) will prove its worth as an up-builder in this class of cases, charging the blood current with nutritious elements and finally overcoming the debilitated state. Its palatability gives it added utility, a feature worthy of consideration in choosing remedial agents of this character.

The Neglected Therapy of Convalescence.

The physician of education and experience, who keeps in touch with the progress of medicine generally, is well informed as to the treatment of most of the "thousand and one" ills that he is called upon to combat. The diagnosis and treatment of acute conditions as well as the successful management of the more chronic affections are subjects which he is constantly investigating and studying. It so happens, however, that after the dangerous shoals of medical navigation have been successfully negotiated and when the crisis or danger point has been passed, the physician is all too liable to relax his vigilance and to allow the patient to convalesce without sufficient attention to the therapeutic details of this important period. While the feeding of the convalescent is of great importance, the medico-tonic treatment is equally essential, in order to improve the appetite, tone the indigestive, assimilative and eliminative functions generally and to hasten the time when the patient shall be once more "upon his

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feet." Among all of the general reconstituent and supportive measures in the therapy of convalescence, none is more essential than the reconstruction of a blood stream of vital integrity and sufficiency. Pepto-Mangan (Gude) is distinctly valuable in this special field, as it furnishes to the more or less devitalized blood the necessary materials (iron and manganese) in such form as to assure their prompt absorption and appropriation. One especial advantage of administering these hematinics in this form, is that digestive disturbance is avoided and constipation is not induced.

The Hay Fever Riddle.

Despite the many therapeutic advances of recent years, "what to do for the hay fever patient" continues to be something of a puzzle. The long-sought specific still eludes us. Nevertheless, the malady is not quite the enigma that it once was. Medication, if still empiric, is not ineffective. The symptoms of the disorder can be controlled or minimized; relief, though temporary in many cases, may be obtained; and for these blessings the afflicted patient and the sympathetic physician may well be thankful.

For use in the treatment of hay fever there is, of course, a long line of so-called available medicaments. One dependable agent which comes naturally to mind in this connection is adrenalin. Indeed, it is doubtful if any other single medicinal substance has been so largely and successfully employed in the treatment of vasomotor rhinitis. As adapted to the needs of the hay fever sufferer the product is available in a number of convenient forms, as adrenalin chloride solution, adrenalin inhalant, anesthetic cream, anesthetic inhalant, anesthetic tape, etc. The various solutions are used in spraying the nares and pharynx, the cream for snuffing into the nostrils, the tape for packing the nostrils. All cases of hay fever, of course, are not amenable to the same form of treatment. It is a logical presumption, however, that a vast majority of them ought to yield to one or more of the preparations above referred to. The adrenalin products, as is well known to most physicians, are manufactured by Parke, Davis & Co., who will doubtless be glad to send literature regarding them to any practitioner. Requests for printed matter may be addressed to the company at its main offices and laboratories in Detroit, Mich.

After the Baby Comes.

The weakness and debility which usually follow childbirth are all too prone to linger. The burden of lactation is very apt to further

prolong convalescence and increase the liability to all manner of complications. In such cases, vigorous tonic treatment is urgently required and the resulting reinforcement of vital processes promptly changes the situation.

Gray's Glycerine Tonic Comp. is peculiarly serviceable as a reconstructive and restorative for the nursing mother, not only because of its notable efficacy in promoting functional activity throughout the body, but especially because of its freedom from all contraindications. Thus it can be freely administered both during pregnancy and thereafter without a fear of its producing any but the most substantial benefits to the offspring as well as to the mother. Few remedies are more effective for increasing the lacteal flow than "Gray's," inasmuch as it exerts its influence through improving the whole bodily nutrition rather than by stimulating a single function at the expense of the rest of the body.

From the University Eye-Clinic at Jena, Prof. D. W. Stock (Director), come very excellent reports from Dr. G. A. Hegner, Senior Clinical Assistant, upon the results obtained from the use of Syrgol in conjunctival inflammation, especially gonorrheal conjunctivitis.

The favorable reports of Kollbrunner regarding the use of Syrgol in specific urethritis induced the ophthalmologists at Jena to make experiments with the new preparation. Hegner states that their results have been so gratifying that Syrgol is looked upon by them as a most valuable addition to the various means of treating suppurative diseases of the conjunctiva. He says that, where there is thickening of the eyelid with extreme edematous swelling and the tissues became so hard as to render it difficult to inspect the diseased structures in order to confirm the diagnosis, treatment should be given with the purpose of allaying the inflammation and reducing the swelling of the lid. "Protargol, Sophol and Argyrol have in the past proved beneficial, but since our experience with this new salt, Syrgol, we regard it as superior in its ultimate results."—Hegner.

Syrgol is a brownish-black, odorless colloidal oxide of silver. Physically it consists of shining crystalline scales which dissolve in two parts of water. A five per cent. solution is almost painless and does no damage to the cornea.

In twenty cases of gonorrheal conjunctivitis, he reports that gonococci disappeared from the secretions in a short time and speedy recovery took place in every instance. Three exceptionally severe cases

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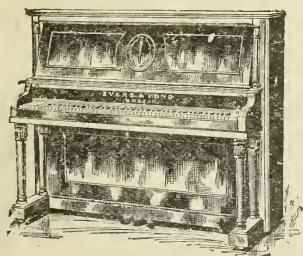
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are reported in detail, speedy recovery resulting in each instance. In the three cases described the most noteworthy feature was the rapid disappearance of the gonococci and the prompt subsidence of inflammation.

Good results were also observed in many cases of ophthalmia neonatorum. By using Syrgol healing took place usually in about a week. In two cases recovery took place in four days, and seldom was it necessary to continue treatment longer than two weeks. An interesting fact that he mentions was that two cases which were not doing well previously showed rapid improvement when transferred to the clinic where Syrgol was employed.

Syrgol proved of much service also in cases of conjunctivitis following operation for cataract. Favorable results were obtained also in cases of inflammation of the lachrymal ducts. He mentions a patient suffering from an acute dacryocystitis in which there was swelling and considerable redness, together with feeling of pressure over the duct. The sac was washed out thoroughly with a one per cent. solution of Syrgol and complete recovery followed in eight days. A similar result was obtained in a case where there was a purulent discharge from the lachrymal sac, but no inflammation present. Two such cases, of course, are not sufficient to enable one to draw positive conclusions, but they certainly indicate that good results in both acute and chronic inflammations of the lachrymal sac may be obtained by irrigation with Syrgol.

The manner of applying the remedy is quite simple. In acute cases of blenorrrhea a five per cent. solution is dropped into the conjunctival sac from two to three times a day, and the eye is bathed frequently with a solution of boracic acid in order to wash away accumulated secretions. In some cases it may be found advisable to use a two per cent. solution.

The treatment of gonorrheal conjunctivitis is made easy because of the absence of irritation following the use of Syrgol. Instillation of this remedy in the eye and using an antiseptic solution as a wash is quite often sufficient to effect a cure.

Drugs for the Expulsion of Hookworms.

Observations were made under the supervision of the author to ascertain the efficiency of various drugs in removing hookworms. A careful examination of the stools and enumerations of all hookworms expelled in each case were made. The subjects under observation were Indian immigrants into Natal, and numbered 83. Eucalyptus, izal, pelletierine tannate, thymol,

and beta naphthol were the drugs employed, each individual receiving repeated treatments with one of these until no more hookworms were expelled. The men were given a light meal of sago for their last repast on the day preceding treatment, and on the same evening an aperient consisting of six drams of magnesium sulphate. Thymol and beta-naphthol were each given in three doses of 30 grains each at intervals of two hours, followed again in two hours by six drams of magnesium sulphate. These two drugs proved about equally effective, the proportion of hookworms expelled by the first treatment being, respectively, 97.87 and 97.52 per cent. The thymol treatment, however, using a total of 90 grains of the drug, was found to cause a serious constitutional disturbance. Stimulation of the nerve-centers was at first evident, the individual being excited and talkative, and the pulse and respiratory rates quickened. Subsequently dizziness and drowsiness were complained of, and if the patient was not kept recumbent some syncope might be exhibited. Under the 90-grain beta-naphthol treatment two of the men merely complained of slight nausea and a sensation of warmth in the epigastrium. There was no excitement or exhilaration, and faintness never developed to any alarming extent. The author considers that beta-naphthol is equally as effective as thymol, but is superior to it in causing comparatively little general disturbance, and in costing much less. A 60-grain beta-naphthol treatment also proved fairly effective, the first treatment expelling 86 per cent. of the parasites present. This drug was given in the following form: Beta-naphthol 4 drams (16.0); mucilage of tragacanth, 1 ounce (32.0); peppermint water, to make 6 ounces (192.0). The beta-naphthol was first carefully triturated and the mucilage and water then added, the resulting mixture containing the drug in suspension.

Oil of eucalyptus, given in the dose of 2.5 Gm. (38 grains) along with chloroform and castor oil, expelled 74.2 per cent. of the parasites at the first treatment; izal, given in 4-dram doses with chloroform water, expelled 90 per cent., while pelletierine tannate, given in 12-grain doses, proved absolutely inert, not a single hookworm being expelled by two doses from ten men in whom beta-naphthol subsequently led to the expulsion of numerous parasites. —Burton Nicol, *Journal of Tropical Medicine and Hygiene*.

Budwells Emulsion of Cod Liver Oil.

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question of nutrition," while Naumann follows with "Cod Liver Oil is an almost ideal ready-made food," and Bartholow adds, "We have no single drug (referring to arsenic) of equal utility in chronic forms of phthisis."

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irritating effects. The testimonials and recommendations of physicians in all parts of the United States would indicate that the profession has found in Budwells Emulsion a combination of those most valuable remedial agencies and food values, palatable, miscible, and attractively prepared.

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Celebrated Vienna Physician will Lecture in this Country.

By Marconi Transatlantic Wireless Telegraph to the New York Times.

Vienna, June 8.—Prof. Carl von Noorden, a celebrated member of the Medical Faculty of Vienna University, who is going to New York in September at the invitation of the Post-Graduate Medical School, to deliver a series of lectures, will also go to Washington to take part in the International Hygienic Congress as the official delegate of the Austrian Government. He has also accepted invitations to lecture in a number of other American cities.

The Professor has selected as the theme of his lectures the progress made in the

treatment and cure of diabetes and kidney troubles as well as the science of dietetics.

Prof. von Noorden will return to Vienna by the middle of November.

In anemia, loss of appetite and during convalescence, to promote assimilation when the appetite is impaired and an aid to digestion is desired, Elixir Maltopapsine, prepared by The Tilden Company, will afford the most satisfactory relief.

Treatment of Uterine Hemorrhage.

Whitehouse remarks that in the treatment of uterine hemorrhage, the first consideration is proper diagnosis, and individual treatment will depend on the conditions revealed. Where the bleeding is due to a high arterial blood pressure, the tension must be reduced by means of purgation, nitroglycerin and dieting. Purgation will also be found of value in depletion of portal circulation where hemorrhage results from hepatic cirrhosis. Should the calcium index be low, menorrhagia will be helped by the administration of this agent, preferably in the form of a lactate. Intrauterine applications, such as hydrogen peroxide and protargol, have given good results in cases of bacterial infections. Treatment in these cases must be long and thorough.—The London Lancet,

Treatment of Nasal Catarrh.

Low writes that vaccines do not give good results in the treatment of nasal catarrh. He believes that an acute catarrh free from sinus trouble might be benefited by the vaccine treatment, but, where the nasal passages are obstructed by anatomical disturbances, as is so often the case, nothing less than a surgical operation will remove the defective conditions. He urges as a preventative measure the adoption of the paper handkerchief in place of the customary linen, and also favors the plan of having the patient order a new suit of clothes, as the pocket becomes contaminated with secretions from the nose carried to the handkerchief. This brings on a renewal of infection, and, as a result, continuation of the trouble.—The London Practitioner.

President-Elect of the American Medical Association—John A. Witherspoon, M. D.

For the fourth time in its eventful history since its initial meeting in 1847, this representative organization of the Regular Medical Profession in the United States has honored a citizen of the capital city of the Volunteer State by (unanimously in this instance), electing him to the Presidency.

Of the sixty-four members who have held this honorable position in the existence of the Association, that four have been selected from the physicians of this locality is a most creditable recognition of the high standing of its medical men by their colleagues throughout the wide and verified domain of our great country; and the elder Eve, with his international reputation; the courtly and courteous Bowling; the tireless and energetic Briggs, who have occupied so enviable and prominent a position in the years respectively of 1858, 1875, and 1891, will have a most able and worthy successor in 1913 in the person of Dr. John A. Witherspoon.

Dr. Witherspoon was born near Columbia, Tenn., forty-eight years ago, obtaining his literary education in the private schools of his locality and at Beemore School in West Tennessee; he received his medical education in the Medical Department of the University of Pennsylvania, receiving his degree of M. D., in 1887; in his third year he was made assistant demonstrator of anatomy, on account of his proficiency. He practiced medicine at Columbia for several years, coming to Nashville a little over twenty years ago to accept the chair of Principles and Practice of Medicine in the Medical Department of the University of Tennessee; and in 1895, on the separation of the Medical Department of the Vanderbilt University from that of the University of Nashville, he was made Professor of Principles and Practice of Medicine and Clinical Medicine in Vanderbilt University, which position he has held since that date with great credit to himself and the institution.

For nearly a quarter of a century he has been an active, earnest and energetic member of the Nashville Academy of Medicine, the Tennessee State Medical Association and The American Medical Association, obtaining the high honor of President of each one of these medical organizations, by reason of his efficient and capable work in each; regular—we may say constant in his attendance; always ready and willing for any duty or service required of him; modest, courteous and kindly in his manner; eloquent and lucid as a speaker; earnest and tireless as a student during his whole career, he could always be depended on for wise and timely counsel, and he is to be congratulated on securing appropriate recognition of his worth and work.

The J. A. M. A. in an editorial, June 15th, ult., has the following: "For nine years he served as a member of the Council on Medical Education of the A. M. A. He has been a member and president of the American Medical College Association, the

THE STOMACH

WEAKENED BY DISEASE
EASILY and with the LEAST EXERTION
TAKES UP and DIGESTS



BECAUSE IT CONTAINS
the NUCLEO-ALBUMINS & NUCLEO-PROTEIDS
The HIGHEST NOURISHMENT.
A TRIAL IN YOUR NEXT CASE
WILL SHOW ITS VALUE.

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ANTIMALARIAL AND TONIC
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A Combination Promptly
Effective in Malaria,
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Anaemias, Etc.

Fully and pleasantly replaces,
and is specifically more effective
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so often accompany the administration
of quinine.

Sample to Physicians on request.

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HOUSE OF DELEGATES, A. M. A.: Dr. J. Howell Way, Waynesville; Alternate, Dr. P. J. Thomas, Wilmington; Dr. A. J. Crowell, Charlotte; Alternate, Dr. D. S. George, Bayboro; Dr. T. E. W. Brown, Asheville; Alternate, Dr. J. V. McGougau, Fayetteville.

Medical Society of the State of North Carolina meets in Morehead City, June, 1913.

The Tri-State Medical Association of the Carolinas and Virginia (only members of State Societies eligible). Next Annual Meeting: Norfolk, Va. Date of meeting February 1913, President, Dr. A. E. Baker, Charleston, S. C., Secretary Treasurer, Dr. Rolphie Hughes, Laurens, S. C.

Tennessee State Medical Association, the Southern Medical Association and the Mississippi Valley Medical Association. At the International Medical Congress at Budapest Dr. Witherspoon was selected to deliver the oration in the ceremonies at the unveiling of the statue of George Washington. Dr. Witherspoon is a man of strength, whose power impresses every one with whom he comes in contact, but, withal, he is a soft-spoken, courteous, chivalrous, typical Southern gentleman. No man is more beloved in the South than he, and yet no man has done so much to stir up the physicians of his section or to encourage them to higher standards, ethical and educational. The wisdom of the choice of Dr. Witherspoon as President-Elect of the Association is unquestionable. His lovable personal characteristics, his strength and ability, his broad grasp of the advanced medical problems of the day, all combine to make him a welcome leader for the coming year and acceptable to the profession the country over."

The Nashville Academy of Medicine and the Nashville Board of Trade will give a banquet and reception in his honor on the evening of July 3rd, inst., in this city; and have placed in charge Drs. Duncan Eve, M. M. Cullom and Wm. McCabe of the Academy of Medicine; and Messrs. J. Garland Tinsley and Frank Fite of the Board of Trade, to either of whom any of his professional or secular friends desiring to be present can communicate, personally or by mail.—The Southern Practitioner.

Complete Displacements of the Lower Cervical Vertebrae.—Quetsch (Munch. med. Wochenschr.) describes five cases of total luxation of the lower cervical vertebrae which occurred among 100 cases of injuries of the spine not terminating fatally. In view of the sudden and marked narrowing of the spinal canal as the result of this injury and the danger of involvement of the important spinal centers in this region it is remarkable that luxations of the cervical vertebrae have been followed by relatively high percentage of recoveries. The adaptability of the cord, however, is very great, and contusion and laceration are not as marked in all parts as was formerly assumed. In three of the author's cases the paralytic phenomena were fairly severe, but later subsided. The degree of complete anterior luxation is no criterion of the amount of damage to the cord, although it bears a direct relation to the degree of mobility of the head. The backward luxation gives the best prognosis functionally and causes the least disturbances in the movements of the head. Quetsch's cases show that unreduced total luxations in

young and vigorous persons after compensatory changes have occurred make recovery with more or less complete restoration of their working capacity. Reduction is only possible in recent cases by means of extension apparatus, and is particularly advisable where the disturbances of the spinal cord are of serious character.

Treatment of Urethritis.

Asch remarks that he has found a paraffin mixture which liquefies at 104° F. beneficial in the treatment of urethritis. He injects 5 or 10 Cc. of the mixture into the urethra. He then closes the outlet with the fingers for about 5 minutes, by which time the paraffin has hardened sufficiently so as to run out. It tends to distend the of the urethra, exerting a soothing action on the tissues. It can be left for a period of twelve hours. The author injects previously a little local anesthetic to prevent muscular contraction. The patient is instructed to drink as little before and during the treatment as possible, and the bowels are emptied. A few drops of ichthyol may be added to the paraffin. The mixture at body temperature is of about the consistency of a salve.—*Zeitschr. fur Urologie.*

Treatment of Sleeping Sickness.

Ellacombe points out that in the treatment of sleeping sickness, tartar emetic was given in a series of injections in a comparatively highly concentrated solution, 40 minims from a hypodermic syringe, the needle of which was passed directly into the lumen of the vein. Although effecting this method was disadvantageous in that it caused the patient great pain and discomfort, due principally to the unavoidable escape of small quantities of the solution into the tissues. During a second series of injections, the author used a Fleming "606" apparatus. With this apparatus, it was possible to inject a preliminary dose of normal saline in order to test the location of the point of the needle. In thus using normal saline there is the advantage that the patient suffers no subsequent pain and discomfort. The author also tried soamin, but this apparently had little effect. Mercury, nuclein and urotropine were also given, but no beneficial results followed their use—*Jour. Trop. Med. and Hygiene,*

"Robinson's Lime Juice and Pepsin" is an excellent remedy in the gastric derangements particularly prevalent at this season. It is superior as a digestive agent to many other similar goods. (See page xiv this issue.)

The Chlorosis of Young Girls.

To permit the blood stream of chlorotic girls to remain in an impoverished state, is to expose them to more than one peril. Such patients are usually high-school or seminary girls, struggling with duties that tax their every ounce of force. When the break comes, as it almost inevitably will the physician has on his hands a girl whose recovery takes much time and care. In most instance this could be avoided were the girl put on Cordial of the Extract of the Extract of Cod Liver Oil Compound (Hagee).

As a blood-maker and general tissue builder, it is of much value in chlorosis. Not only are the blood corpuscular elements increased in number, but also a noticeable improvement takes place in their quality. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) will prove its merit in these cases and its systematic administration over a considerable period of time will save chlorotic girls much of the distress to which they otherwise would be subjected.

At the eighty-first annual commencement of Wesleyan University at Middletown, Conn. held on June 19th., the degree of doctors of laws was conferred upon Dr. Amos J. Givens, proprietor of Givens Sanitarium for nervous diseases at Stamford, Conn.

Alkalies in Diabetes.

Rathery, in regard to the administration of alkalies in diabetes, states that they ought not to be given continuously, but at intervals, and are for the most part contraindicated in the debilitated, the anemic, the tuberculous, or badly-nourished diabetic except in the presence of acidosis. Alkalies are especially indicated when an antidiabetic regimen has not fully succeeded;

He writes that, although magnesia in doses of 4 to 6 Gm., and ammonium carbonate from 1 to 4 Gm., have been used in certain cases with satisfactory results, the most commonly employed alkalies are the bicarbonates of potassium and sodium or the citrate of sodium. The thermal alkaline waters are also of use, even such as Vichy in obese diabetics. Pouques in asthenic cases, and Vittel in gouty diabetics. The author favors the intravenous method of injection of alkaline solutions in cases of acetonemia, and to be of any real service the injections must be given in the precomatose state. This is characterized by persistent headache, insomnia, and dyspneic phenomena. The urine should be examined for Gerhardt's reaction, which if present, indicates the existence of acidosis. There

is then no time to be lost. In complete coma the intravenous injection of a liter of solution containing 4 grams per cent. of sodium bicarbonate may be given. Recoveries at this stage, however, are rare. Sometimes a certain amount of edema follows these injections. This has been attributed by Widai to the retention of chlorides but it is of no special import.—Brit. Med. Jour.

Fracture of the Internal Malleolus.

Wegner (Munch. med. Wochensh.) reports a case of fracture of the type first described by Bircher and termed by him fracture of the malleolus lateralis tibiae posterior. It would seem that these cases cannot be diagnosed without careful Roentgen examination. In Bircher's case a disc of bone was torn off from the posterior end of the tibia. The space between the tibia and the fragment was often very slight and only visible in the x-ray picture as a fracture line. His case had been diagnosed by another surgeon as a fracture of the leg at the lower third. When seen by him some time after the injury there was still present a swelling of the leg and foot, but no shortening nor displacement. The mobility of the ankle was impaired. The Roentgen picture revealed a small fragment torn from the malleolus as well as a spiral fracture of the fibula with distinct callous formation. The injury had resulted from a slip. While slight in character the after-effects are sometimes sufficient to render it worthy of consideration.

We beg leave to call the attention of the Journal of the A. M. A. to page 24 of the advertising pages of Munsey's Magazine for May, next to frontispiece. Here will be found an advertisement of a medicinal preparation advertised on page 19 of the advertising pages of the Journal of the A. M. A. There is an old proverb that people should not let their children throw stones at green houses till their own windows are boarded up for the summer vacation.—Buffalo Medical Journal, Established by Austin Flint, M. D.

After Scarlet Fever and Measles.

After the acute diseases of childhood there is no remedy that will do more to hasten convalescence than Gray's Glycerine Tonic Comp. Children are particularly responsive to the tonic effects of "Gray's" and it is always gratifying to see the prompt improvement in the appetite, digestion and general nutrition that follows its administration. The palatability and clean bitter taste of "Gray's" makes it exceptionally acceptable to children.

The CHARLOTTE SANATORIUM

LABORATORY-DEPARTMENT

CHARLOTTE, N. C.

The attention of the physicians and surgeons is called to the advantages which this institution offers in methods of laboratory diagnoses.

Many physicians through lack of time, technical training or laboratory equipment find it difficult to utilize the many methods of microscopic and clinical examinations so essential to a proper diagnosis.

To the physicians and surgeons of the Carolinas and Virginia, the Charlotte Sanatorium Laboratory offers, at moderate cost, facilities for such examinations. Animal inoculation, chemical, bacteriological and histological examinations will be made as the case requires.

The following directions are suggested for the benefit of those who may forward material for examination.

All specimens should be accompanied by a brief note descriptive of the clinical condition and a special reference to the character of the examination desired.



The Main Building Front View.



Seventh Street Entrance.

The name and address of the person to whom the report is to be sent should be clearly indicated.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test.

— After carefully washing, prick the lobule of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and allowed to dry without being spread out on the surface of the slide. After they have dried, the

allowed to dry without being spread out on the surface of the slide. After they have dried, the

slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—

Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count, etc., should be sent to the laboratory on glass slides. As thin a smear as possible should be made.

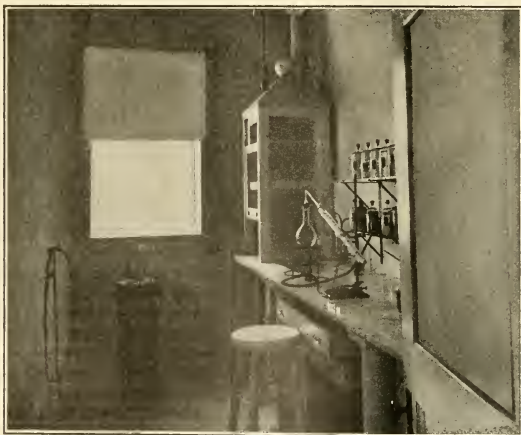
Smears For The Detection of Gonococci.—

One drop of purulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made over the surface of the slide.

In collecting a specimen from a female patient, care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.



Clinical Laboratory, Showing Arrangement of Desks, Microscopes, Microtomes, Incubator, Centrifuge, Etc



Clinical Laboratory, Showing Autoclave, Hood, Operating Tables, Etc.

operation or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiled paper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and the material from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in the bottom of the jar before

Urine.—for bacteriological examination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlich's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Pathological.—material from either op-

the tumoris dropped in.

Feces.—should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

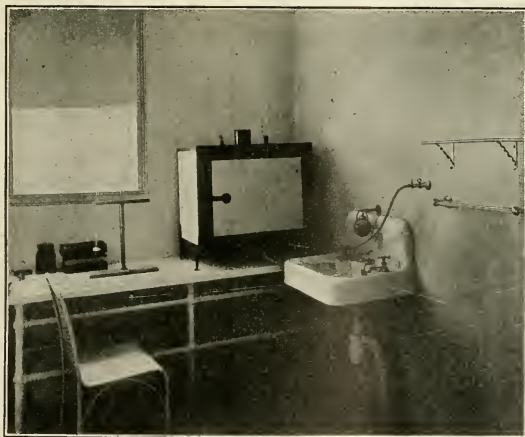
Wassermann's Test.—Since the advent of the discovery of 606 for the cure of Syphilis. the employment of the Wasserman test, both before and after its use, is conceded by all scientific investigators to be of the highest importance as a control to the curative effect of this remedy. The Charlotte Sanatorium Laboratory is specially equipped for carrying out this Wasserman Sero-diagnosis test for Syphilis.



(Clinical Laboratory. Showing Supplies, Working Table. Etc.)

Specimens sent to the laboratory for this test should be obtained as follows.

1st. By using an ordinary antitoxin syringe, and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourniquet applied, taken the blood from the vein by means of the syringe



Clinical Laboratory, With Hot Air Sterilizer, Scales, Lavatory, Etc.

to coagulate, cork, pack and mail as any other fragile package. Atleast two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.—The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.—should be sent in a sterilized bottle. A large vaseline or quinine bottle usually answers the purpose.

2nd. By means of capillary attraction, as illustrated in Fig. 11 represents empty capsule; tourniquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tube, allow



Fig I



Fig II.

swab 50 Bacterial Cultures 1.00 Sterilized solution.. 5.00 Spinal Puncture and Analysis 5.00

Address all specimen to the Charlotte Sanatorium Laboratory, Charlotte, N. C.

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The following table gives the cost of many of the examinations made in this laboratory:
Smears and Stains (tubercle bacillus,) gonococci, etc. \$1.00

Blood.

Hemoglobin and Erythrocytes 1.50
Leucocytes..... 1.00
Differential..... 1.50
Malarial parasites 1.00
Complete analysis 3.00

Urine.

Chemical 1.00
Microscopical ... 1.00
Complete analysis 1.50

Pathological Sections.....5 00

Feces Examination 2 00
Blood Culture ... 5.00
Cultures and isolation of bacteria..... 5.00
Stomach Contents 2.00
Widal Test..... 2.50
Tissue Sections.. 5.00
Tuberculin Test 5.00
Wassermann's Test 10.00

Milk.

Chemical 2.50
Bacterial 5:00
Water analysis, bacterial examination.. 5.00
Chemical examination including alkalinity, chlorides, ammonia, nitrates and nitrates ...5.00
Quantitative analysis \$10.00 to 25.00
Culture Media (per tube) 25
Sterilized tubes and pipettes 15
Coagulation time 2.50
Vaccines 10.00
Sterilized Tubes with

North Carolina State Board Examination for Licensing Embalmers and Undertakers June 4, 5, 6, 1912.

WRITTEN.

(a)

1. Describe the shape and location of the heart.

2. How many subdivisions has it? Name them.

3. Describe the location of the liver.

4. Describe the location of the kidneys.

5. Describe the location of the stomach.

6. Describe the location of the pancreas.

7. Describe the location of the large and small intestines.

8. Where are the female organs of generation located? The male?

9. Where are the lungs located?

10. What are their functions?

(b)

11. How many general cavities does the trunk of the body contain?

12. What tissue separates these cavities?

13. What does the thoracic cavity contain?

14. What organs does the abdominal cavity contain?

15. Locate the cavity of the cranium.

(c)

16. How many distinct circulations are there in the human body? Name them.

17. What vessels with their branches form the first or general circulation?

18. What vessels with their branches form the second?

19. What vessels form the third?

20. Where does the great trunk artery originate, and where does it terminate?

21. Where do the trunk veins originate, and where do they terminate?

22. Describe the difference between the arteries, veins and nerves.

23. Describe the contents of the arteries in life and after death.

24. Describe the contents of the veins in life and after death.

25. What are capillaries?

(d)

26. What causes discoloration of the body after death?

27. What are some of the signs of death?

28. What per cent. of the body weight is blood?

29. Is it necessary to draw blood from the arteries or veins?

30. If it should be necessary to draw blood, how should it be done?

31. What causes skin slip?

(e)

32. What is the meaning of disinfection?

33. What are the three best disinfectants?

34. What is bacteria?

35. Do climatic conditions effect bacteria?

36. If so, how?



GLYCO- THYMOLINE

FOR
SUMMER COMPLAINTS

PROPHYLAXIS—The very nature of artificial foods and cow's milk predisposes to their rapid decomposition. A few drops of Glyco-Thymoline added to each feeding corrects acidity and prevents disorders of stomach and intestines.

TREATMENT—As an adjunct to your treatment of summer complaints, Glyco-Thymoline used internally and by enema corrects hyper-acid conditions, stops excessive fermentation and prevents auto intoxication. It is soothing—alkaline—nontoxic.

KRESS & OWEN COMPANY,
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FORMULA:

Benzo Salicyl. Sod. 33-33: Eucalyptol .33; Thymol. 17: Salicylate Methyl. from Betula Lenta .16: Menthol .08 Pini Pmuil-ionis-16: Glycerine and solvents q. s. 480,

37. What causes decomposition?
- (f)
38. What is understood by the term of embalming, and what effect does it have on a dead body?
39. Name and locate the arteries which can be used by the embalmer and those most practical for use.
40. How soon after death should a body be embalmed?
41. Is it necessary to do both arterial and cavity embalming?
42. What are the indications of a thorough circulation?
43. How is the brain supplied with fluid after death?
44. Why are arteries used in embalming for injection, instead of veins?
45. When the organs of the body are removed, how should you embalm it?
46. What organs are effected by typhoid fever, and what part of the body should receive special attention?
47. What organs are effected by tuberculosis, and what part of the body should receive special attention?

(g)

48. Can a body be shipped which is dead from a disease which is neither contagious or infectious without embalming?
49. Is the transportation of bodies dead from contagious diseases prohibited? If so, what diseases?
50. How can you ship a disinterred body?

ORAL.

(a)

1. How can you tell when a person is dead?
2. What is rigor mortis?
3. What is putrefaction?
4. What position should a body be placed in while embalming it?
5. What arteries are generally used?
6. What quantity of fluid is necessary to preserve a body?
7. Give the systemic circulation.
8. Give the pulmonary circulation.
9. Do you remove blood before or after injecting fluid?
10. How would you embalm a body when arteries are filled with blood?
11. How would you embalm a body dying of dropsy?
12. What is the position of the heart in the body?
13. Where do gases usually accumulate?
14. How do you dispose of gases which have already accumulated?
15. What do you do if you failed to get an arterial circulation?
- (b)
16. Can bacteria or germs be destroyed by the use of chemicals?

17. Name some of the chemicals used to destroy germs.
18. How would you prepare a body dying of diphtheria for shipment?
19. How would you disinfect the apartments where body died?
20. What is a deodorizer?
21. What means do you take to avoid carrying infection after handling a body dead of a contagious or infectious disease?
22. How would you prepare a body dying of typhoid fever for shipment?
23. Name some of the infectious diseases.
24. What is the best disinfectant solution for discharges from bodies?
25. Give shipping regulations for contagious and non-contagious diseases.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm names of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Vaccine Therapy in Diseases of the Nose, Ear, and Larynx.—Fraser and Ross (Edinburgh Med. Jour.) give an admirable digest of this method of treatment which is still in the experimental stage. From a study of the recent literature on this subject they consider the following conclusions justified: Certain acute cases may be prevented from becoming subacute or chronic by the use of vaccines. Vaccine therapy is likely to be most useful in subacute cases, but may prove a useful adjunct in chronic cases. Autogenous vaccines should be used, and in resistant cases should be freshly prepared from time to time. Small doses of vaccine repeated at frequent intervals have given excellent results in many cases. T. Ritchie in the same issue gives a very good general review on vaccine therapy.

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The Treatment of Cancer.—Coley (Guy's Hosp. Gaz.) reviews his results in the treatment of malignant tumors by means of bacterial toxins. The origin of his method lay in the observation that malignant tumors often retrogress after accidental infection with erysipelas. At first he inoculated such tumors with living streptococci, but soon desisted on account of frequent alarming or even fatal infections.

Since then the Dr. has used streptococcus toxins, at first alone, later in combination with prodigious toxins, the so-called Coley's fluid. His best results were obtained in sarcomas. In general, he considers his treatment indicated only if the sarcoma is inoperable; but of late he has come to the conclusion that osteosarcomas that would necessitate amputation of a leg or arm justify a trial with Coley's fluid. The writer reports a number of such cases cured, apparently permanently, without operation. The Dr. has so far succeeded in curing 65 cases of inoperable sarcoma, nearly 20 per cent. of the cases treated by him. Of these, seven have remained free from recurrence for eighteen years, seven for ten to fifteen years, seventeen for five to ten years, ten for three to five years. Besides his own 65 cures, he has received reports of 30 cases of inoperable sarcoma cured by others.

The author begins with $\frac{1}{4}$ minim, injecting daily and increasing the dose slowly until a febrile reaction results. The first injections are made not into the tumor but elsewhere. Later the injections are made alternately into the tumor and elsewhere, sometimes intravenously. The dose requisite for the production of the first reaction varies, sometimes reaching 5 or 6 minims; after it occurs, the injections are given every other day or at longer intervals, excessive reactions being avoided. The treatment must often be continued for a long time, sometimes for years. When successful, the treatment results in a poor nutrition and increased mobility of the tumor. This may often be observed after a few treatments. Later, the tumor begins to grow smaller and finally disappears.

Treatment of Cough Associated with Vomiting in Tuberculosis.—Paillard (Progres medical) gives a review of this subject. Among the forms of treatment the Dr. considers most effective is that recommended by Mathieu and Roux, in 1903, viz., the administration of chloroform water directly after meals, to prevent the onset of the "gastric cough" by exerting a local anesthetic effect on the stomach. Where this preparation proves ineffective, a saturated solution of bromoform, or a flavored emulsion of menthol in the proportion of

one to 1,500 or one to 750. Lion recommends the administration of twenty grammes of bismuth subnitrate in two-thirds of a glassful of water, one hour before a meal. This is continued for ten or twelve successive days, after which, even though the drug is stopped, the vomiting no longer occurs. He recommends the following measures: 1. Rest after meals; any physical effort induces dyspnea, which, in turn, may provoke coughing and vomiting. This rest should be taken in the recumbent position, the patient lying on the right side in order to favor evacuation of the stomach. 2. When the patient feels the coughing spell coming on, he is to resort to a few inhalations of oxygen from a tank placed conveniently near the couch or bed. This, according to the author's experience, either wards off the coughing spell entirely or renders it much milder, so that vomiting does not follow. If, later on, the tendency to cough reappears, further inhalations may be used. Of thirty-two cases in which these inhalations were given for a few weeks, only in three instances did the vomiting reappear; in each case the simultaneous use of chloroform water brought permanent relief. That the effect of oxygen was not a psychic one was shown when it was administered to some patients without informing them of the result expected; the usual effect was exerted in these cases. Some patients complain of dryness of the throat as resulting from the inhalations; this may be avoided by passing the gas from the tank through a small washbottle containing boiled water.

The Radical Cure of Hernia in Infants and Young Children.—Kellock (Proc. Roy. Soc. Med.) attaches considerable importance to the congenital origin of inguinal hernia in young children, so far as the sac, at any rate, is concerned, and thinks that the only "acquired" factor is the protrusion of some viscus into an already existing sac. The Dr. says that operation can and should be done at an early age, and believes that a suitable procedure is the one he has reduced to a very simple form. Some importance is attached to preparatory treatment: an infant who has a hernia of any size is kept for a few days before the operation in the Trendelenburg position, with the feet and legs over a wedge pillow, so that the hernia is kept out of the way. In the operation itself, an inch incision is made through the skin at right angles to the direction of the cord, and just above the external abdominal ring. This incision is well away from the genitals, and is accompanied by very little bleeding. The coverings of the cord being divided longitudi-

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nally, the sac is found, isolated, drawn down, transfixed and ligatured as high up as it can be reached, and the skin wound then closed.

Professor Davenport in his admirable work on the Diseases of Woman, Dr. L. G. Boyd, Tunnelton, Ind., reviewing adds:

How can we prevent dysmenorrhea? It can be done by keeping the patient under morphine, but this is a barbarous solution of an important problem. It in fact does not solve it. Morphine is inadmissible and improper in these cases. It produces derangement of the secretions and tends to establish a drug habit that will make life a burden. I have long employed a remedy that not only relieves the pain, but produces no habit and is not dangerous. I refer to

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Where the patient is very nervous, having the tendency to hysteria, neuroses or uterine congestion, I administer Neurosine one part, in combination with two parts of Dioviurnia, which always gives relief.

The Menthol-Kelene Autospray. (Fries Bros.)

The anti-neuralgic effects of Menthol have long been known. It is familiar in its solid form as "Chinese Headache Cure," and was used by rubbing over the part affected. In this form, however, it was not sufficiently efficacious, and careful study has evolved a solution of Menthol with Kelene in the proportion of 5 per cent. of Menthol. The Kelene gives the necessary energy and the Menthol the duration, and applied as it is by the Autospray it gives the happiest results. The well-known and lasting effects of Menthol, combining with the cooling, refreshing and immediate effects of Kelene, produce a complete and prolonged alleviation, and it has achieved a most remarkable success. The spray should be projected upon the painful parts, carefully avoiding contact with the eyes, as Menthol, while not dangerous, is momentarily painful.

It is endorsed by the medical profession, many prominent physicians using it with the hope that it will take the place of the numerous headache reliefs, which are taken internally and have the tendency to upset the stomach or act upon the heart more or less dangerously. Menthol-Kelene, being applied externally, is absolutely harmless, and it gives immediate relief.

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Iodipin is regarded by Schindler as the best vehicle for incorporating salvarsan ("606") for intramuscular injection. The salvarsan is rubbed up with 25 per cent.

iodipin and sterilized anhydrous lanum, until a very smooth 40 per cent. ointment is obtained. This is filled in tubes and is warmed before use, so that it can be injected through a fine needle. A preparation four weeks old has not changed in color, so that in all probability the suspension is permanent and not apt to undergo chemical change through oxidation, as with aqueous suspensions. The technique of injection is as follows: The skin is disinfected with tincture of iodine. The injection is usually made into the external third of a line joining the anterior superior spine with the tip of the sacrum. The oil is warmed and then injected, care being taken that no blood vessel is punctured with the needle. After injection the patient should rest for a few hours. Applications are as a rule not necessary, since the patients usually experience no pain. After use, the needles should be kept in paraffin.—Berl. klin. Woch.

The Preponderating Role of Perversions of Instinct in Mental Maladies.

Berillou divides all human instincts into four orders: instincts of nutrition, of conservation, of sociability, and of reproduction. All mental maladies result from derangements of these instincts. If one of these instincts is disarranged there results a loss of mental equilibrium. An obstacle to the satisfaction of an instinct causes a profound effect on the intelligence and sensibility. In any psychopath one should endeavor to find out the most marked imperfection in the realization of the instincts. The abnormal way in which he goes about the satisfaction of the instincts shows the psychopathic predisposition of an individual. There is an exaggeration or a lessening of these instincts; changes in nutritional instincts cause anorexia and sitophobia, gluttony, voracity and bulimia. Abnormalities of conservation cause impulsiveness to suicide, or anxiety and hypochondriasis. They may also cause parsimoniousness or prodigality. The social instinct when perverted causes sanguinary brutality or absurd sentimentalism. That of reproduction causes erotomania, heterosexual jealousy, or homosexual degradation. Among neuropaths, however serious be their functional troubles, the instinctive dispositions preserve their normal tendencies. There are no alterations or perversions of instincts. This is the means of differential diagnosis between psychopathies and neuropathies.—Gazette des Hopitaux.

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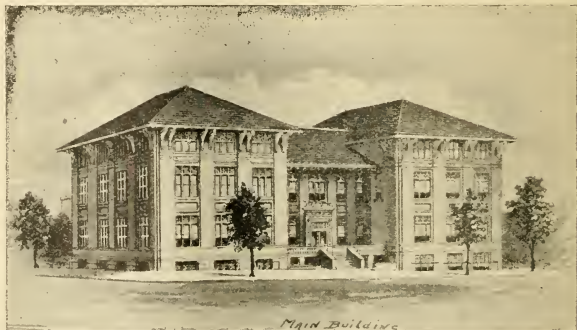
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No. 2.

Congenital Haemangiomata.*

By Henry Norris, M.D., Surgeon to the Rutherford Hospital, Rutherfordton, N. C.

The consensus of opinion seems to be that all haemangiomata are present at birth but often are not noticed by the parents or nurses until some weeks later. This is especially true of the deeper varieties and of those occurring in fat children; hence it seems proper to designate all these conditions as congenital.

Haemangiomata are vascular tumors composed of capillaries, veins or arteries, with a certain amount of connective tissue as a framework, and in some cases with an abundant nerve supply. According to the character of the vessels that make up the tumor, Nicholls subdivides them into haemangioma simplex (telangiectasia), in which there is an excessive development of capillaries with a relatively scanty formation of arteries; haemangiomata arteriole, composed principally of small arteries with a relatively small proportion of capillaries and veins; and haemangiomata cavernosum, in which there are large vascular spaces or sinuses lined with endothelium.

They are usually found in the skin and subcutaneous tissues, but may occur in the heart, kidney, spleen, uterus, intestine, bladder, muscles, bone, breast and brain. Of the histogenesis Nicholls says that they are met with in situations corresponding to the embryonic lines of fusion, such as the facial and brachial clefts, and that the angiomas found at the orifices of the body, in the face, neck, and upper part of the breast, are of the nature of fissural haemangiomata.

Many of them are at first little more than telangiectases, but after a more or less prolonged period of latency they may increase in size. Other haemangiomata appear to have some relation to the nervous system, beginning as small red spots on the skin and gradually spreading over an area corresponding to the peripheral distribution of some cutaneous nerve.

Thoma has called attention to the part that physical and mechanical principles play in determining the origin and development of haemangiomata and has shown that an increase of blood pressure so that it exceeds the normal will result in the production of new capillaries. This observation would seem to justify the assumption

that high maternal blood pressure during pregnancy may act as a causal factor in producing haemangiomata.

These tumors vary in size from the smallest birthmark to large cavernomata involving an entire extremity, as in a case of my own or as in cases reported by Ferre, in which the whole upper half of the child's body was involved, and one reported by Adamson in which the tumor occupied the whole right lumbar region of a girl aged ten years. They occur most frequently on the head, next on the trunk and then on the extremities. It is not uncommon to have quite severe hemorrhages from erosions or ulcers. Very rarely cicatricial contraction takes place in them and a retrograde process ensues by which they may completely disappear. Sarcomatous degeneration has been noted.

Fitzwilliams, who has written a paper based on an analysis of seven hundred children with naevi, most of whom were seen at the Great Ormond Street Hospital for Sick Children, comes to the following conclusions: That females are affected more frequently than males. That naevi are almost always present at birth and only comparatively few appear at a later date, the exceptions to this rule being spider marks and deep seated naevi. That naevi usually start on the surface and less frequently in the deeper structures, and that their extension and growth is intimately connected with the nerve supply of the part.

Of Fitzwilliams' series of cases, forty-nine per cent. were situated on the face, scalp or neck; twenty-nine per cent. on the trunk; twenty-one per cent. on both limbs (of the latter twelve per cent. were on the upper limbs and nine per cent. on the lower).

The following reports are of some of the more unusual situations: R. Cassirer and R. Muhsam report a large angioma of the brain successfully removed and cite three cases of Krouse's. In all four cases the course was slow and the symptoms were those of Jacksonian epilepsy. In each case there was a history of slight trauma in childhood. E. Banin reports a case of racemose angioma of the brain successfully removed. Fitzwilliams quotes three cases recorded by Cusling of port wine marks on the face associated with epilepsy, in two of which the dura was found to be involved on trephining. J. Bondy reports a case of angioma-sarcoma of the liver in an infant, in which the diagnosis was made by ex-

*Read by title at the North Carolina State Medical Society meeting, Hendersonville, June, 1912.

ploratory laparotomy and microscopic section. There was a progressive enlargement until death occurred at three and a half months. Israel records a case of cavernous angioma of the liver successfully operated, in which the diagnosis was made prior to operation by the disappearance of the swelling on pressure which he considers a pathognomonic sign. H. O. Pantzer records a case of angioma of the uterus, bladder and broad ligaments treated by ligation. MacGowan reports three cases of angioma of the papillae of the kidney successfully treated by conservative operations, in which the kidney was saved in each case. Ryerson reports a case of angioma of the larynx and refers to some others. His case was treated by radium. Klinedinst reports a case of angioma venosum of the orbit cured by injections of alcohol. P. Harrass and W. Spuchier say that there are a dozen cases of primary angioma of the parotid in literature. They report a case successfully excised. A. J. Gilmour reports a case of cavernous angioma of the neck which was noted at birth. J. B. Carnett reports two cases of angioma of the neck successfully removed by excision.

Treatment.—In the treatment of haemangioma, liquid air, carbon dioxide snow, radium, x-ray, high frequency spark, galvanopuncture, electrolysis and the mercury quartz lamp have all been successfully employed, whilst injections varying from boiling water to Piazza's liquid have been used. Friedlander is a warm supporter of carbon dioxide snow, the credit for which he gives to Pusey. It is cheap, easily applied and comparatively painless.

Piazza's liquid is composed of water fifteen parts, perchlorid of iron (30 per cent. solution) fifteen parts, chlorid of sodium four parts. The injections should be made gently, five or six drops at a time. I have used with good results in several cases, boiling water as suggested by Wyeth some years ago, but am of the opinion that no injections whatever should be made except in the most superficial haemangioma, where compression is possible, on account of the danger of embolism. In extensive cases operative interference is not only justified but is indicated.

Case Report.—The following is a report of the most extensive case that I have ever seen, and in which amputation was deemed necessary to save the child's life.

M. W. L.; female; aged five years and three months was referred by Dr. Lee, of Lattimore, N. C. No family history of any similar condition. No hemophilia. Normal delivery. At birth Dr. Lee noticed that the left leg up to the groin was swollen and that the superficial veins were enlarged.

The mother gave the inevitable history of maternal impression. The child was first seen by me in August, 1910, when she was three years old, and my notes of that date are as follows: "Small, poorly nourished child; visible mucous membranes pale; heart action rapid, 160 to 180; haemic murmur. The left leg from toes to groin is from two to three times as large as the right. The entire leg is dark bluish red in color and warmer than the unaffected side. Enormously dilated veins irregular in their outlines are easily seen, and from the phalangometatarsal junction to a point two inches below the head of the tibia there is a soft, compressible tumor having a pronounced thrill. A few inches below Poupart's ligament there is another angiomatous mass measuring one and one-half inches by three inches. Below the knee the whole leg seems to be practically one large tumor and is everywhere soft and compressible." Amputation was advised, and declined by the parents.

On January 3rd, 1912, the patient was admitted to the Rutherford Hospital on account of severe hemorrhages from several small necrotic areas on the dorsum of the foot and on examination it was found that the condition in the thigh had greatly improved, and that there was no thrill or bruit above the knee. The child complained of no pain except in the toes. Over the upper part of the tibialis anticus muscle there is an elongated prominence with a thrill and bruit; a thrill can also be felt over the dorsum of the foot, the ankle and part way up the inner side of the leg. The foot is very much swollen and around the second toe there are several ulcers extending to the dorsal and plantar surfaces. There is superficial gangrene of the second and third toes. The skin varies from red to reddish blue and the tumor mass can be increased in size by pressure applied above the knee. The skin shows numerous small vessels but the tumor involves principally the deeper structures. The leg is very flabby and the child cannot bear any weight upon it.

As the child showed very markedly the effects of hemorrhage and her haemoglobin was only forty-five per cent. she was kept in the hospital for nineteen days before operation.

On January 22, 1912, a circular amputation in the lower third of the thigh was performed. All the divided vessels were the size of an adults. There was practically no shock, as the leg had been made bloodless by elevation and an Esmarch's bandage. No sections of the amputated leg were made as it was presented to the museum of the College of Physicians, Philadelphia. Convalescence was uneventful and

the child was discharged from the hospital on the twentieth day.

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was well and doing his full allowance of work. Because of slight hemorrhages, and occasional spitting of blood during the past nine years, he has been repeatedly examined by physicians of unquestioned ability. About three months ago he had a hemorrhage on the street and this was the beginning of the end.

A young married woman of 22 was perfectly well until fever caused a doctor to be consulted and tuberculosis was found. She came to us at once, and already it was too late. The whole of the right lung was gone, and the left infiltrated on both sides of the interlobar fissure.

She had never coughed, never expectorated, never had the slightest suggestion of illness, and so had never been examined.

A married woman of 28 had never had a days illness in her life until six weeks ago when she caught grippe from her brother. As the lung did not clear up when it should, the sputum was examined and found positive. When I examined her two weeks ago the left lung was solidly infiltrated and there were rales in the right apex.

A young man of splendid earning capacity spit blood occasionally for six years. During these years he spent several hundred dollars consulting prominent physicians who all assured him that he had nothing to fear. During these years he was well and strong with every appearance of perfect health. He was suddenly taken ill, and died of tuberculosis in two months. Some time afterwards his brother developed tuberculosis and it is doubtful if he can recover.

These cases are typically common—pathetically so—but the lesson that they teach is not well enough known. It is not because of the failure to detect tuberculosis in these cases that I call your attention to them, but because they illustrate a truth that is not appreciated. Tuberculosis specialists are beginning to see that infection in the adult is nothing like as frequent as in the child. That in all probability the infection occurs in childhood and does not manifest itself as pulmonary tuberculosis until later on in life. If we could detect the infection in childhood and extinguish it, we should save the adult.

In the majority of our cases, the patients have no idea of the real duration of the disease. They think they have had tuberculosis for so many months, whereas, in all probability it has been for so many years. Incipient tuberculosis is coming to mean simply that only a slight portion of the lung yields physical signs. It has absolutely no association with time or duration of the disease, and in some cases it is a very misleading term. The expression incipient tuberculosis is based upon the physical

Field Work in Tuberculosis.*

By Mary E. Lapham, M.D., Highlands Camp Sanatorium, Highlands, N. C.

There is today dying in our camp a young man of 28, of fine character, and large earning capacity. Only three months ago he

*Read before the Hendersonville meeting of the North Carolina Medical Society, June 18-20, 1912.

signs, and when these signs are misleading the inference is misleading also. Incipient tuberculosis and the extent of the lesions as revealed by physical signs are coming to have a very questionable value. Threads of infiltration running along the bronchi and through the lung do not reveal themselves by physical signs. When the infiltration is purely extra-bronchial and extra-alveolar, there may be no cough, no expectoration, no temperature, and nothing to suggest an examination of the lung until it is too late. In all cases the real extent of the lesion is far in excess of its manifestations.

We are beginning to ask ourselves, What is incipient tuberculosis and when does it begin? Day by day we feel more strongly that the methods for handling the tuberculosis problem are wrong, and very inadequate. We wait until the patient seeks us. This is far too late. This is giving the enemy too much of a start. Our present methods do not reach far enough back. We begin at the end, instead of at the beginning. To adequately fight tuberculosis we must fight the infection long before the patient has any idea that it exists.

We believe that tuberculous infection of the lungs of an adult is comparatively rare. In the vast majority of cases, the infection occurs in children and waits its day. 25% of all children under five give a positive reaction to tuberculin, and this percentage becomes fifty when the children are directly exposed to tuberculosis. At the age of 15, 90 to 95% of all children give a positive reaction to tuberculin. Most of these children escape. Autopsies show that from 70 to 90% have had tuberculosis. Evidence is accumulating to show that nearly every child is infected, but that only a small percentage are unable to resist. During childhood, this small percentage is manifested chiefly by surgical tuberculosis, while pulmonary tuberculosis is mostly shown after fifteen.

In the majority of cases, the infected child gives no sign and the infection remains latent until, for some reason or other, the balance of power is lost and latency develops into active aggression, and the process begins to extend. This change from harmless latency to dangerous activity is very gradual and unnoticed. There is no suggestion of menace, no hint of threatening disaster. Point by point the insidious invasion advances, slowly weaving its web through the lung, with the patient all unconscious and oblivious of the danger until some clinical manifestation demands investigation. Happy the patient that spits a little blood, or has a bad cough, or expectorates tubercle bacilli, or in any way

calls attention to the danger, while yet it may be overcome. Woe to the patient that never coughs, never expectorates, never has any temperature, is never examined and remains perfectly well until the end.

It seems to us that to wait until tuberculosis manifests itself clinically is to make a great mistake. The enemy has had too much time and gotten too strong a hold upon the lung to be easily dislodged. We cannot begin too soon after the infection occurs, and the only question is, How shall we know when this happens?

Why not give all children at the age of fifteen a tuberculin test, and if the reaction is positive put them out of doors, feed them well, and keep watch of them until they cease to react to even large doses of tuberculin. The smaller the focus of infection the better it can be encapsulated and imprisoned until a future outbreak is rendered impossible. Extinguish the process in the child and you will destroy the crop of future tuberculosis patients. The child of today is the tuberculous adult of the future. Eradicate it in the child and save the future victim. At present, we have every reason to believe that every year and every month and every day will add its quota to the list. We can save these sacrifices by curing the children.

Consider the advantages of overcoming the infection in the child as compared with fighting it in the adult. The child has to be supported—there is no loss of productive capacity. Simply putting the child on a course of tuberculosis treatment does not interfere with his education. Very little difference is made in the expense. Everything is in favor of stamping it out in the child when a pin-head's growth may be all there is to extinguish.

We have every reason to believe that under the present regime every year and every month and every day will bring its crop of tuberculosis victims. If we could cut off the supply at the start, would it not be an inestimable saving of suffering and money? The educational value to the profession would be very great. The time would come when it would be exceedingly unusual for a case of tuberculosis to slip through our fingers undetected. The accumulated data would put every physician on the qui vive. We would learn how many of our infected children developed tuberculosis in later life. We could learn the frequency of primary infection in the adult, and test the truth of our theories by their results.

We shall never know the real condition of our State, as far as the extent of tuberculosis is concerned, until a thorough canvass is made. We test our cattle for tuber-

culosis. We have a well organized force against the hook worm. We enforce vaccination against small pox. Why not initiate the most effectual crusade that has ever been undertaken against tuberculosis? We should put a board of experts into the field—experts that can use a portable x-ray apparatus and draw correct inferences from tuberculin reactions. Think what an educational value this would have upon the profession, and how much the ability to detect tuberculosis would be raised in the next few years.

The State government would never spend the money? I am afraid this is true, and yet the cost of tuberculosis to the United States for the last year was over a billion dollars. Ten hundred million dollars in one year—lost as completely as by fire or flood—with no thought of an indirect saving or profitable return—such as preventive measures yield. It would be interesting to know how much North Carolina contributed. Since we have to face such an expenditure would it not be better political economy to spend more towards a future return? Our State government depends for its revenues upon the value of taxable property. Increase this and you increase the revenues. The wealth of a country as measured by what it produces, is but the expression of the true wealth of all States, the brains and the productive capacity of its inhabitants. The genius of its citizens is the fundamental basis of taxation. Since the wealth of a State is in its citizens the wisest political economy is to spend enough money to safeguard the health of its citizens. This is so very evident that it is hard to understand why our legislators so bitterly grudge the expense of publicly protecting the source of all revenues. Killing the goose that laid the golden egg is no more ridiculous than letting disease kill it. Possibly our State government would be less loath to spend money combating tuberculosis if they could be made to understand distinctly and clearly how much more profitable it is to spend money preventing the loss by tuberculosis than to spend it after the individual has it. One is productive and the other unproductive expenditure. We cannot estimate the amount of suffering caused by tuberculosis—that is beyond human calculation. Let us hope that some day the old North State will come to the help of its threatened citizens and uproot the danger before it can do harm. Then will our State make a second name for herself as great as when the Mecklenburg resolutions were passed, and other States, seeing what North Carolina is doing, will follow her example. The child is father to the man in tubercu-

losis as in all else. Save the child, and you will save the man.

Remarks on the Management of the Pyrothorax.*

By Dr. James M. Parrott, M.D., Surgeon Memorial Hospital, Kinston, N. C.

Medical men, like all humanity, are prone to follow leaders, and along beaten paths. I am persuaded that this is done too frequently under certain conditions as well as too seldom under others. Surgeons very often fail to obtain a desired result because they undertake to treat the pathological condition without giving due consideration to the patient. Surgery as well as internal medicine was at first based upon empirical ideas. Almost in a night the entire surgical viewpoint was changed to a pathological one. The pendulum swung far, really too far in that direction. The advanced thinkers are now leading us to a clearer conception of the surgeon's work. We are realizing that there are other things aside from pathology to be considered in surgery. We are learning that the normal functions of the body are to be reckoned with. The era of "physiological surgery," as so aptly expressed by Morris, is dawning.

Following leadership blindly and with only the pathological in mind is strikingly illustrated by the generally recognized management of pyrothorax. Some years ago surgical bell-weathers declared that amounted to almost a wholesale removal of ovaries. In those days, as some one so aptly said, one was not in style gynecologically unless one carried a fresh ovary in the vest pocket. Fortunately for the propagation of the human race surgeons learned more conservatism, and many ovaries have been saved for future usefulness.

Some surgical leader imagined (I cannot believe that he did more than imagine) that the separation of the soft parts from the bone was necessary in harelip operation. said the leader "to prevent undue tension and consequent sloughing of soft parts." Coffins and visions of terrible facial disfigurement at once arose to frighten the timid. For years and years no one dared to think of doing a harelip operation without this very needless mutilation. Now many experienced surgeons (others are learning it) think that the cheek separation is not only not necessary but really adds a needless complication.

Pyrothorax will run a parallel course in some respects. The masters teach that of resection and drainage should be done at

*Read before the Hendersonville meeting of the North Carolina Medical Society June 18-20, 1913.

ways, and some writers intimate that anything short of this should be condemned in language severe. Some of these classify pyrothorax into three groups—acute, subacute and chronic, others in only two, acute and chronic; and yet practically from the viewpoint of case management they put all these cases in one group only—treat all in the same way. "The hand of iron in the rubber glove" is laid on all alike. Without due discrimination they declare in substance what is "sauce for the goose is sauce for the gander." The patient is apparently ignored and physiology is forgotten. The rule of rib resection and drainage is applied as rigorously as if it were a law of the Medes and Persians. Mr. Quilp was not more inflexible with his wife than surgical leaders have been in insisting on this procedure. Really, should every case of pyrothorax be continuously drained? I am sure not. Nearly all chronic cases had best be treated by rib resection and drainage or one of the more severe operations, but not so the acute and the so-called subacute ones.

I view every case of pyrothorax either as acute or chronic, the subacute being one of degree only and properly belonging to one or the other class. The acute cases are best treated by thoracentesis, practicing irrigation of the pleural cavity in certain foul cases under favorable conditions. It is often necessary to aspirate two or three times, but even four to six times, or more, is better than drainage. The pain and annoyance of repeated aspirations are really insignificant as compared to lung collapse as result of pleural drainage. The mixed infection which always follows, with more or less severity, the drainage operation is a powerful factor for evil and must be reckoned with. This very often turns the tide against a patient already weakened and more or less devitalized. Every experienced surgeon has noted the marked change in the character of the pus after a drainage operation, for example, a pneumococci pleural infection. We all know that the saprophytic infection is most serious, and how much more so it must be when engrafted on a pleura already engaged in a fight against almost overwhelming odds with, for example, tubercle bacilli. Every experienced surgeon knows how dangerous is lung collapse from traumatic pneumothorax when occurring in health. Much greater is its danger when it occurs in a body already weakened by sickness. Pulmonary pressure apparatus has not yet been brought to a stage of development which makes it entirely satisfactory, though I expect great things along this line.

Morris has called our attention to what he terms "points of resistance" in the

human body. For illustration witness the rarity of oral wound infections. Tongue incisions always show primary union. On the contrary, how dreaded are knee-joint injuries for the very reason of the lack of resistance there. The pleura is also a "point of weak resistance" to infection. It is impossible to sterilize the air which with inspiration and expiration passes in and out a pleural opening. A change from pneumococcal to a mixed infection is often noted in twenty-four to forty-eight hours. Is it best for the patient to add this burden to his rapidly becoming over-powering one? I think not. Simple aspiration correctly done entirely prevents this very dangerous complication. Personally, I prefer a dozen pleural aspirations to one lung collapse, to say nothing of one added saprophytic pleural inoculation.

The question naturally arises, how can an aspiration or a half a dozen aspirations effect a cure? By identically the same process as effects a cure in drainage. Metabolism is an old word now not much used but I confess I like it. Simple aspiration or aspiration with pleural irrigation (to be practiced in some cases) unquestionably aids in re-establishing a pronouncedly healthy tissue metabolism. More than this it materially aids nature in re-adjusting the cell circulatory equilibrium and indirectly stimulating capillary circulation. More yet, it revives and revivifies physiologically the lymph circulation. All this it does better than drainage and without the dangers attending drainage operations.

The human mind is so ingenious that it can argue, and well, for or against anything. So to be really convincing to the doubting one must present proofs founded on actual experience. What of the result of aspiration as compared to drainage in acute pyrothorax? Mind you, I do not take the position that chronic cases should be treated in all instances by aspiration, though it will undoubtedly do good in select cases, even in this class. Neither do I claim that every acute case should be treated exclusively by thoracentesis. Aspiration deserves to be tried in simple uncomplicated (when the causative factor has ceased or there is no communication with the outside) chronic pyrothorax. It may or may not prove successful, and simple drainage will often fail in these cases. Such cases call for more radical procedures, the discussion of which is not within the province of this paper.

Thoracentesis in my hands has proven much more satisfactory than drainage and my results have been decidedly in its favor. Two or more aspirations are usually required. It is not often that I fail to obtain

a cure after the third. It is my custom to repeat the seance on the third, fifth or seventh day after the initial. It is a very highly satisfactory procedure in children and it has never failed me with the little ones. It is not so satisfactory in adults as in the children, but even with them it is much better in my opinion than drainage in the average case.

The question of irrigation with aspiration is an important one. Properly performed it often does good—a great deal of good. It is not needed in more than 30% of cases. It is indicated in mixed or saprophytic infections and should be used when the surgeon is in doubt if surrounded by favorable conditions (in hospitals or when sterilized water and apparatus can be obtained). I prefer 1 8000 bichloride followed with normal salt solution. From every viewpoint my experience has led me from the time-worn text-book procedure of rib resection and drainage to thoracentesis with or without irrigation in treating all acute cases of pyothorax. My statistics are more favorable to the latter procedure.

Foramitti's "Tubulization" Method of Nerve Suture; with Report of a Case.

By Gaston Torrance, M.D., Birmingham, Alabama.

Foramitti reported his experiments in nerve suture by means of absorbable tubes, in 1904, from von Eiselberg's Clinic in Vienna. In some cases he used the artery of the same animal, which was aseptically removed and placed in salt solution, in others the blood vessel was removed and hardened in formalin before being used; the results were practically the same in both methods.

The aim of his operation was to isolate the ends of the nerve in a tube which would serve as a guide for the new growth in the restoration of the normal function and prevent cicatricial adhesions around the point of suture. It was found to be essential that the tube be of an absorbable material so as not to act as a foreign body in the tissues and of such a texture that the nerve would not become adherent to it. He found that for general use the veins and arteries taken from a freshly slaughtered calf combined all of these features; and prepared them in the following manner: The artery being stretched over a glass rod or tube was hardened in a five or ten per cent. solution of formalin for 48 hours; washed in running water for 29 hours; boiled for 20 minutes and then placed in 95 per cent. alcohol.

In 1907 Hashimoto and Tokuoka reported fifty operations done on forty-seven patients by this method (Aus dem japanisch-russischen Kriege, 1904-5). Their results were uniformly good when undertaken early

enough. Good results were obtained in some cases 200 days after injury, but the prospects were much more promising when undertaken earlier. They had thirty-one satisfactory results out of the fifty operations. None were good after 300 days had elapsed. Neuralgia vanished at once or soon after operation. Restoration of nerve function and normal nutrition in the limb did not become manifest in less than six months to a year.

Report of Case.—A colored woman 29 years of age was admitted to my service at the Hillman Hospital May 21, 1908, giving the following history: About six months ago she had her arm cut down to the bone on the outer part of the anterior surface at the elbow; this was sutured up and healed by primary union; since this time there has been wrist drop with the hand drawn towards the radial side; pronation and supination only slightly affected; the ring and little fingers are flexed on the palm and the other fingers are partially flexed; has lost all power of extension of the thumb; complete loss of sensation in the thumb and index finger and extending up to the wrist.

Operation.—Under ether an incision was made to expose the musculo spiral nerve, which was found to be severed just above where it divides into the radial and interosseous, so that the ends were not widely separated and were caught in the scar tissues of the wound; each end showed a bulb formation of the nerve and scar tissues; these were excised and the nerve terminals sutured together with a fine cat gut in an absorbable tube prepared from the artery of a cow after Foramitti's method slightly modified; good apposition was obtained. The wound was closed without drainage and a cast was applied with the arm at right angles. A small blood clot formed in the superficial tissues and became infected from the skin, the wound was opened and this infected material evacuated and lightly packed. She left the hospital at the end of a week with healthy granulating surfaces. When seen a month after the operation the wound was perfectly healed and she had regained sensation in the hand except a narrow strip across the thumb at the base of the nail and could extend the fingers to a right angle with the palm.

She was lost sight of for more than a year when she reported that the numbness in the thumb disappeared in about nine months and that her arm and hand were perfectly normal at the end of a year.

Zur Technik der Nerven-naht von Dr. C. Foramitti—Archiv. fuer Klin. Chirurgie Band 73, Heft 3, page 643.

Ueber die Schussverletzungen peripher Nerven und ihre Behandlung (Tubuliz

tion) von Prof. Dr. Baron T. Hashimoto und Dr. H. Tokuoka Archiv. fuer Klin. Chirurgie Band 84, Heft 2, page 354.

Drug Addiction—Cell Destruction: A Glance at its Pathology.

By J. W. Williams, M.D., Richmond, Va.

"The improvement of the microscope and of histological methods have rendered possible the discovery of changes in organs and cells, which fifty years ago were undreamed of"—Sir Victor Horsley, F. R. S., F. B. C. S., M. B. B. S. late Prof. of pathology in the University College Hospital, London. Drug addiction is chiefly limited to the class of medicines known as narcotics, and includes opium, alcohol, ether, chloral, cocaine, cannabis indica and heroin. "They first influence the cells of the cerebral cortex".—Dr. Paul B. Barringer in Transac. Med. Soc. of Va. All of these drugs have a two fold action upon the brain and nervous system. (A) temporarily exhilarant, lasting for a short time; (B) a sedative or depressant effecting lasting much longer, in proportion to the amount taken! The heart slowing down to the danger point, and the habitue often sinking into insensibility. All of these drugs taken in excess have the same physiological action—a short stage of excitement followed by a complete lack of mental control, fall of bodily temperature followed by a deep sleep and lack of power to move or feel. Alcohol, (public opinion to the contrary notwithstanding,) acts in the same way. Before the discovery of ether or chloroform, Dr. Collier in 1839 performed a surgical operation on a negro "who was rendered insensible by breathing the fumes of alcohol". The convoluted surface (cortex) of the cerebrum is composed of masses of minute bodies called nerve corpuscles (cells) which are grouped in "areas" or "centers"—"sensori receptive areas" and "sensori-motor areas", which have two functions (1) of receiving and recording the sensations which are constantly coming in from our sense-organs, the eye, the nose, the ear, the skin, the muscles; (2) of the issuing or sending out impulses to the muscles to produce movements. The posterior spinal nerves report sensations to the brain, and the anterior nerves sending their messages from the brain to the various parts of the body. The dura mater lines the skull, while the more delicate vascular membrane, the pia mater, consisting of a dense network of blood vessels covers the convoluted surface of the brain, and sends its minute arteries and veins into all of its parts; thus keeping the protoplasmic nerve cells bathed in healthy blood, which contains nourish-

ment essential to their vitality. It must be remembered that all plants and animals are built up of very small atoms of matter called cells, from the microscopic, unicellular *torula* (one-cell) or yeast plant up to the patriarch of the forest—the oak; and from the *amoeba* (one-cell) up to man who crowns the summit of this living pedestal of animal life. "The organism is not an individual, but a social mechanism—always bringing us at last to cells"—Virchow. Now it is the life of the individual cells that forms the ultimate basis of the complex phenomena of the life of man. And the question at once arises, what physiological effect has morphine, cocaine and alcohol upon the integrity of these cells of the brain, and nervous system? All of these drugs enslave or form "habit" and directly influence the cells of the cerebral cortex. "All cerebral stimulants effect the cranial centers in the inverse order of their development"—Dr. Barringer. The intellectual faculties first, then other vital functions, and last and lowest of all, the functions of respiration and circulation. When ether or chloroform is pushed we see one function after another is abolished, even reflex motion is destroyed, and only respiration and circulation are maintained. "Or let us recall the all too well known physiological action of alcohol in excess and see how it conforms to the above law"—W. H. White, London. "If alcohol" (and the narcotics of its class above mentioned) "first stimulate and then successively exhausts the centre of inhibition, that is man's centre of control, is it not certain that a centre thus daily and hourly exalted and depressed will in time be injured?"—Dr. Barringer. The enslaving drugs above mentioned are comparatively new. "The first line upon opium addiction appeared in 1862." A little before this, the alkaloid morphine appeared, then the hypodermic needle followed. China had for ages been using the crude opium, but not the alkaloid morphine. Erythoxylum had been used by the inhabitants of Peru, but they never heard of the alkaloid cocaine, which came into use about 1880. The Jews used grape juice and fermented wine four thousand years ago, which contained about 4 or 8 per cent. of alcohol, but not our concentrated alcoholic whiskies. (See old Testament currency of *chemer*, *yayin* and *Tirosh*. Gess. Heb. Lex.) Europe never heard of the distillery prior to the eleventh century. Recent experiments upon the lowest forms of cell-life—starting with the one cell plant (*torula*) up to the cresses, geraniums, etc., and with the *medusae* (one-cell) up to man of many millions of cells, have shown the destructive effect of alcohol upon the cells of both plants and

animals. Profs. Ridge and Hodge have demonstrated the alcoholic destruction of plant cells. And Sir B. W. Richardson and other observers are unanimous in their teachings, based upon careful investigation, of the injury of alcohol upon the animal protoplasmic cell life, both animal and vegetable. Now as the foundation of all cell life animal and vegetable, is the same—protoplasmic—the bearing of these recent investigations of the injurious effect of alcohol, and especially morphine, upon the brain of man is at once apparent. Dr. Mott (see Sir Victor Horsley's work, p. 121) exhibits sections of the brain taken from the sensori motor area, and sections taken from the same area of the brains of the alcoholics, who died at Claybury Asylum. The contrast is striking. "The nerve-cells in the alcoholic brains have extraordinarily *diminished* in numbers, having *degenerated* and *wasted* away. The majority are *shrunk* and hopelessly *wasted* away. The cells *degenerate*, *shrink* and *disappear*. The cells damaged in this way *never* recover, and as far as we know are *never* replaced." The experiments of Kraepelin at Heidelberg show that alcohol is neither a tonic nor a stimulant. The bar of scientific research refuses to accept the theories and traditions of the past, unless they are endorsed by science at the bedside and in the laboratory. This is the latest and most alarming testimony of science, as to the damaging effects of alcohol and morphine upon the living organism of man. Add to this that fifty per cent. of the children born to alcoholic parents are degenerates, and remembering the suffering and misery entailed upon individual and national life, and we face a problem that appeals to all good men and to the State for immediate solution. The effect of morphine poured daily into the blood through the hypodermic needle, and carried by the circulation up and into the microscopic blood vessels of the pia mater—the effect of such blood robbed of its healthy cell-food, and loaded with constant daily doses of morphine or alcoholic poison, when brought into direct contact with the cells of the brain, is (a) to starve them for the want of that very nourishment upon which their vitality depends, and (b) the "habit" now formed, enslaves the victim who, now conscious of his deplorable condition, and sinking lower and lower mentally, physically and morally, yet has no power to arrest his downward course, dies either from extreme weakness (Osler)—(cell starvation), insanity or suicide. The sensori motor area through the anterior spinal nerves sounds the alarm louder and louder ("agony") as the danger line is approached. This pain ("agony") or distress is the cry of the

nerve cells of the entire body for their natural food, and unless heeded, the helpless victim, sooner or later, perishes and leaves a wrecked and wasted life, and fifty per cent. of his children degenerates, as a legacy to his heart-broken family.

2304 E. Broad St.

A Report of Five Hundred Cases Treated with Antirabic Virus at the State Laboratory of Hygiene.*

By Dr. C. A. Shore, Raleigh, N. C.

In 1908 the first patient applied for the Pasteur anti rabic treatment at the State Laboratory of Hygiene and up to May 31st of this year over 600 persons had been treated and at least as many had consulted us about bites from dogs which proved not to be rabid. We are indebted to the Hygienic Laboratory at Washington for the virus for treatment in the great majority of the cases.

The treatment of the 500th patient was completed on February 12, 1912, and we can definitely report that there have been no failures of treatment up to the present time. The statistics in this paper are based on the first 500 treated. There was one death of a patient who refused treatment, although badly bitten. This occurred in 1910 in Durham. In almost all cases the patients applied for treatment within a few days after infection, but in several instances the patients were not alarmed until the death of animals which had been bit by the same dog which bit them. At one time after the death of a young man from rabies in Hope Mills over thirty people claimed to have been bit by the same dog that bit him.

The patients treated may be classified as follows:

White 444, colored 56; male 368, female 132; age under 15, 267; 15 to 50, 201; 50,—32; infected by dogs 319; by cats 42; by cows 3; by horses 5; by man 1.

These patients came from 60 counties as follows:

Alamance	18
Anson.....	3
Bertie.....	3
Bladen.....	3
Brunswick	2
Buncombe.....	5
Burke.....	1
Cabarrus.....	9
Caldwell.....	4
Caswell.....	3
Chatham.....	6
Cleveland.....	3
Columbus	1

*Read before the Hendersonville meeting of the North Carolina Medical Society, June 18-20, 1912.

Craven.....	2	July.....	26
Cumberland.....	41	August.....	26
Davidson.....	5	September.....	46
Davie.....	4	October.....	64
Duplin.....	15	November.....	52
Durham.....	13	December.....	43
Edgecombe.....	11	* During the same period, or more accurately from July, 1908, to May 31, 1912, we have examined 350 rabid animals, as follows:	
Forsyth.....	13	316 dogs; 25 cats; 5 cows; 2 horses; 1 mule; 1 hog.	
Franklin.....	20	These animals were received by months as follows:	
Granville.....	11	January.....	36
Greene.....	7	February.....	26
Guilford.....	38	March.....	47
Halifax.....	7	April.....	46
Harnett.....	3	May.....	38
Haywood.....	4	June.....	18
Iredell.....	7	July.....	14
Johnston.....	17	August.....	14
Lee.....	9	September.....	19
Lenoir.....	7	October.....	33
McDowell.....	1	November.....	31
Martin.....	2	December.....	28
Mecklenburg.....	4	It will be seen that the smallest number were received in mid-summer months, disproving the old theory of the relation between the so called dog days and the disease. It is seen that there is no special predilection for any particular season, and this is in harmony with statistics throughout the world which prove that the disease may occur in any climate, latitude, or season.	
Moore.....	8	These rabid animals came from 60 counties as follows:	
Montgomery.....	1	Alamance.....	14 dogs
Nash.....	11	Anson.....	1 "
Northampton.....	2	Bertie.....	3 "
Onslow.....	1	Bladen.....	3 " 1 cat
Orange.....	3	Brunswick.....	1 "
Pender.....	10	Buncombe.....	5 "
Person.....	2	Burke.....	2 "
Pitt.....	3	Cabarrus.....	7 " 1 cow
Randolph.....	10	Caldwell.....	2 "
Richmond.....	11	Caswell.....	1 "
Robeson.....	4	Chatham.....	5 "
Rockingham.....	15	Cleveland.....	1 "
Rowan.....	15	Columbus.....	2 "
Sampson.....	4	Craven.....	1 "
Scotland.....	6	Cumberland.....	8 "
Stanly.....	1	Davidson.....	7 " 2 cats
Stokes.....	11	Davie.....	2 " 1 cat
Surry.....	7	Duplin.....	4 " 1 cow, 1 mule
Union.....	2	Durham.....	7 "
Vance.....	3	Edgecombe.....	12 " 1 cat
Wake.....	40	Forsyth.....	12 "
Warren.....	11	Franklin.....	5 " 5 cats
Wayne.....	9	Granville.....	5 " 1 cat
Wilkes.....	1	Greene.....	4 " 1 cat
Wilson.....	7	Guilford.....	17 " 1 cat, 1 cow, 2 horses

500

A positive diagnosis of the disease by microscopical examination or by animal inoculation was made in 369 cases; a diagnosis by clinical history in 131 cases. In 10 or 12 of the latter treatment was insisted upon when infection was doubtful. Application for treatment by months was as follows:

January.....	39
February.....	16
March.....	42
April.....	37
May.....	51
June.....	58

Halifax.....	10	"	1 cow
Harnett.....	3	"	
Haywood.....	3	"	1 cow
Iredell.....	4	"	
Johnston.....	16	"	1 cat, 1 hog
Lee.....	3	"	
Lenoir.....	5	"	
Martin.....	2	"	
Mecklenburg..	4	"	
Moore.....	8	"	
Nash.....	7	"	1 cat
Orange.....	2	"	
Person.....	2	"	
Pitt.....	5	"	
Polk.....	2	"	
Rauoolph.....	6	"	
Richmond.....	7	"	1 cat
Robeson.....	4	"	1 cat
Rockingham..	6	"	
Rowan.....	2	"	2 cats
Rutherford....	1	"	
Sampson.....	3	"	1 cat
Scotland.....	6	"	
Stanly.....	2	"	
Stokes.....	2	"	
Surry.....	5	"	
Union.....	1	"	1 cat
Vance.....	2	"	1 cat
Wake.....	34	"	1 cat
Warren.....	4	"	1 cat
Wayne.....	10	"	
Wilson.....	8	"	1 cat
Gaston.....	2	"	
Henderson....	1	"	
New Hanover	1	"	

Before this work was taken up in our laboratory all persons bitten by rabid animals were compelled to go to northern cities for treatment. Just how much has been saved to the State cannot be estimated accurately, but it is certain that it is more than \$100.00 for each patient treated, or a total for the 500 of \$50,000. It may be well to state here that the work was undertaken without any extra appropriation and has been carried on without cost to the State. During the last four years there have been five deaths from rabies in the State, all in untreated persons: One in Durham county, one in Lenoir, one in Stokes, one in Cumberland, and one in Nash. We have not been able to secure statistics as to the loss of live stock but it is annually very large. We get almost daily information about the death of horses, cattle, and hogs in various parts of the State, and the total loss would be astonishing.

The suffering, distress, and loss caused by this disease cannot be realized except by those who see it daily. There is no wish to exaggerate its importance and we know that, fortunately, it is not comparable to tuberculosis and typhoid fever and many other diseases, but so far as I know it is the

only disease which could be abolished by legislative enactment. Our faithful friend, the dog, is directly or indirectly responsible for its dissemination. All mammals are susceptible to the disease, but with few exceptions other animals outside of the canine group do not exhibit the mania for biting when attacked by the disease.

A law, strictly enforced, requiring the proper muzzling of all dogs that run at large would stamp out the disease in a few years. This has been accomplished in both Germany and England where the disease was prevalent 20 years ago. It has never entered Australia because every dog shipped into the country must be quarantined for six months before he can be delivered to the purchaser.

The law should be State-wide, for it is not unusual for a rabid dog to run 20 or 30 miles, and local regulations are of minor value. There is a State law at present which provides a penalty for failure to kill a dog which has been bit by a rabid animal, but the law is seldom enforced.

Many cases of the disease are not recognized in dogs, for there is great variation in symptoms and frequently paralysis sets in before the furious stage is reached. Formerly the veterinarians were prone to give other names to the paralytic type, but I believe the disease is now generally recognized and reported. It is strange that the sentimentalists are so loath to accept the facts. It would be a far more serious charge against the dog to claim that he naturally was subject to attacks of fury, and it is far kinder to him to protect him as well as man from the disease. The disease never develops spontaneously, nor from starvation, excitement, nor fear; it is infectious and conveyed only by inoculation, which is usually by means of a bite from an infected animal.

A general acceptance of these facts should lead to the necessary law prohibiting the running at large of unmuzzled dogs.

Amebic Dysentery.

By Roscoe D. McMillan, M.D., Red Springs, N. C.

Historically, dysentery is among the oldest of described diseases, some symptoms and treatment being known as far back as 1600 B. C.

Hippocrates was the first to describe it as an infection. In regard to the geographical distribution, Ayrs has commented on the fact that "of dysentery it may be said where man is found, there will some of its forms appear."

The term dysentery implies a symptom rather than a single pathologic entity, but the recent words of Shiga, Flexner, and

others render the etiologic classification clearer, but the old clinical distinctions of endemic, epidemic, and sporadic dysentery hold good, as well as those of acute and chronic. Also the pathologic varieties, catarrhal, ulcerative and diphtheritic, but the etiologic classification is perhaps the best.

First.—The chemical, as from irritating foods and metals, as copper, arsenic, mercury, lead, etc.

Second.—The bacterial or bacillary, as the Shiga, Flexner and B. Pyocyamus.

Third.—Protozoal or the amebic type.

Laubl, in 1859, was the first one to offer the suggestion of a specific cause for dysentery. Koch, however, three years before this had demonstrated ameba in sections from an ulcerated bowel, showing a relationship between the parasite and the intestinal lesion. In this country the first ameba were discovered by Osler in 1890, and shortly after confirmation came from Stengel, and from various sources, and now the disease has been found to exist scattered over many sections of this country, and in all parts of the world, but it is essentially a tropical or semi-tropical disease and prevails more extensively in warm climates and in connection with poorly drained soil. In certain sections of the South, right here in our own neighborhood, conditions are almost ideal for the prevalence of this infection, so this subject should be one of lively interest. Unfortunately it is scarcely regarded by the profession in a light at all befitting its high importance. It is a very regrettable fact that by most physicians in private practice, and even in the best hospitals in the Southern sections of the United States, it is not recognized as a distinct disease.

The records of most of them, 90% I venture to say, classify amebic dysentery under the general term of "chronic dysentery."

Amebic dysentery is a colitis, very rarely an ilio colitis, caused by the ameba dysenteriae of Councilman and Lofler; it is considered by most authorities different from the ameba found in the stools of healthy man, to which alone the name ameba coli is given. It would be very interesting, did time permit, to discuss the various views advanced by pathologists as to the real etiologic factor in these cases.

The parasite is water borne, or it may be conveyed by contaminated soil to the mouth by dirty hands or from eating green vegetables grown in sewerage polluted ground. The parasite is from 15 to 20 m. in diameter, having an outer zone (ectosarc) which is clear, and an inner zone (endosarc) which is granular, contains a nucleus, several vacuoles, and perhaps some foreign

bodies as bacteria, blood cells, etc. Its movement is characteristic. It moves by putting forth protrusions of the ectosarc in various directions, for a time not changing its location until presently the endosarc gushes forth into an unusually long protrusion and the ameba move across the slide.

The essential feature of the disease is always an ulceration, inflammation of mucosa more or less general. The submucous coat becomes oedematous, there is infiltration and this raises the mucus membrane in round patches, necrosis sets in and the membrane sloughs. The ulcers formed are either round, oval or irregular, they extend to various depths, so sometimes perforation of gut becomes a complication. The ameba are also found in the tissue, around the ulcers, in the lymph spaces, and in small blood vessels. Abscess of the liver is one of the most serious complications, and this probably takes place through the portal vessels.

The characteristic lesions of the disease are always found in the large bowel, and the generally accepted belief is that the primary site of infection is in the cecum, whence the infection is carried by natural forces throughout the colon and rectum. It is claimed by some that the distal portion of the ileum is sometimes involved, but this is denied by the best authorities.

The symptoms do not differ much from those due to ulceration of intestines from other causes. Loose stools, discharges of mucus, pus and blood, tenesmus, abdominal distention, loss of appetite, strength and flesh, and a progressive anemia, but these are not always constant or clearly defined.

The disease is essentially a chronic one, and occasionally during its course, there are times when the patient thinks he is well, or a great deal better, as most all of the symptoms have subsided, going even so far that the patient may suffer somewhat from constipation. The parasites are, however, so to speak, under cover, and soon break out under certain conditions favoring a renewed activity. When the diarrhea occurs it does not follow any set rule, as a great deal depends on the location of the ulcers, if they are low down in rectum there are frequent evacuations accompanied by marked tenesmus. If the lesions are in sigmoid or above it the movements may not exceed two or three per day. Mucus sometimes is absent, but blood or blood streaked mucus is fairly constant.

As I have said, the symptoms are not always constant or clearly defined, so a bedside diagnosis should not be relied upon entirely. A careful examination per rectum and by using some of the simple method

of examination, the diagnosis should present no difficulties. The ulcers are characteristic, they show a tendency to extend in direction of the circular muscle fibers of the gut. They are covered with white or dull grey pellicles, the removal of which leaves a raw bleeding area. The microscope should be used, the slide being warmed to body temperature, and specimen carefully handled, the ulcer should be scraped and should be free from mucus and fecal matter, the cover glass firmly pressed down on slide. When present, the ameba with their characteristic movement, are sufficient for diagnosis.

Leucocytosis is always present and is in proportion to the severity of the disease.

The diagnosis and treatment is of utmost importance because of the utter hopelessness of a great number of cases being allowed to drag on until they yield to no treatment at all. The actual sources of infection are numerous, so prophylaxis becomes a complicated problem, and its scope is beyond the prescribed limits of this article, but I do want to emphasize hygienic and sanitary measures. The first in regard to the patient; this includes fresh air, sunshine and cheerful surroundings, in some cases change of climate may be helpful, especially through its effect on the general health. The sanitary measures in regard to those in close proximity to patient. Instruct the nurse or attendant on the absolute necessity of destroying all discharges from the bowel and cleansing hands after waiting on patient. The infectious agent is probably in the main water borne and the danger of contaminating the water supply should be carefully explained.

Second.—Rest is always of great importance.

Third.—Diet. For a few days it is well to restrict him to liquids. Predigested foods, peptonized milk, soft toast and soft boiled eggs are sometimes well borne.

Fourth.—Medication by mouth. I don't believe there is any known drug administered by the mouth which will retain sufficient potency after going through some 20 odd feet of intestines, to have any direct influence on the ameba. I am fully aware that ipecac coated with satol given in large doses is lauded by many whose opinions are entitled to all respect, but speaking generally, the administration of medicines by the mouth should be resorted to only in the presence of clear cut indications. The routine administration of any of the so called specifics is strongly condemned, but I do believe in the beginning, and from time to time, a mild mercurial purge should be given.

Fifth.—Local treatment. Irrigations per

rectum with cleansing antiseptic solutions constitutes, in my opinion, the main dependence in a large number of cases. A wide diversity of opinion exists even here, as to the most effective solutions to use, but solutions of quinine are most widely approved, beginning at 1 to 5000 of a body warm solution, used twice a day for a few days, and gradually increasing to 1 to 1000, and at least half a gallon should be introduced before any of it is allowed to return. Later, as patient improves, every other day, or twice a week should be often enough. This should be kept up for some weeks after patient seems cured, and certainly until after repeated examinations fail to reveal any ameba. The success of this treatment depends on certain details in carrying out the irrigations, namely, marked elevation of hips, insertion of small rectal tube three or four feet into colon, and retaining the fluid for at least 15 or 20 minutes. Other solutions, as boric acid, common salt, hydrastis and silver nitrate have been used and recommended by some.

When the rectum is very irritable, a preliminary injection of some anodyne solution, as cocaine or opium, will be required.

But in spite of all, I have said, some cases do not yield to rectal lavage of any of the solutions I have named, no matter how thoroughly used, and in these cases I think surgery offers a very promising field. The operation of choice is appendicostomy in which the caliber of the appendix is used as a means for successful medication of large bowel. If for any reason the appendix is absent or has suffered disease, the cecum is the next resort. The solutions for use here are the same as used per rectum. But understand, I do not claim this as a curative procedure, but it does offer in certain cases the only possible means of gaining access to the ulcers when they are situated very high up. I will not go into the technique of operation, but if it is performed under proper conditions by competent operators, it should give no larger mortality than operation for appendicitis. The disease itself is by no means free from danger to life, as one single complication such as amebic abscess of liver causes a far greater mortality rate than that of appendicostomy.

Home Treatment Versus Climatic in Tuberculosis.*

By Dr. Carl V. Reynolds, Asheville, N. C.

A hackneyed subject, but who will gain-say its paramount importance? The profession has advanced with rapid strides into

*Read before the Tri-State Medical Association at Columbia, S. C.

the secret inroads of the tuberculous strongholds, only to retreat from the position gained by the cry, "you are wrong," from those who are quick to condemn and have little regard for conservatism. By this extreme process—with the exercise treatment, the absolute rest treatment, the climatic treatment, the creosote treatment, the serum treatment, the forced feeding treatment, and now the home treatment—the scythe has cut down, in every walk of life, the most worthy citizens; thereby destroying a pleasant, priceless, active, energetic and live asset; the product being an unhappy, unwholesome, pitiable, inert liability.

Opinions differ in the management of tuberculosis, and, in the treatment, variety has seemed its chief characteristic. With these irregularities and so treacherous a disease, and at times the complete helplessness to control, causes one to raise his hands in humble submission. Logical reasoning, statistical evidence and personal experience should decide the best weapon at hand, then agree to fight with and for it. Would it not be wise to select the good from the bad and fight with conservatism until a specific is found?

Prior to 1882, when battling in the dark and without the knowledge of ways and means of control, this was excusable; but today there is not the slightest reason or excuse for such oscillating methods. Previous to the fall of 1908, the general practitioner had learned to recognize tuberculosis in its innocent stages and, with alertness, placed the sufferer where it was best suited for the individual case, with results most gratifying to the patient, and an honor to himself, and a lessened mortuary table.

Since then a few voices have advocated "Home Treatment," and today things are as they were three years ago; and, in my opinion, it will require ten years to regain what has been lost, as is evidenced by the class of patients now received in climates which were indicated before an attempted cure at home was made. This retrograding process was and is due to the thoughtless opinions—publicly expressed—of men who have gained professional eminence. All err as individuals, but why should medical men, in general, be so prone to fadism? Is it a wonder they are criticised and, at times, justly?

Concentrated, continued, unprejudiced, intelligent perseverance, in methods which have been tried and found best is what is needed to accomplish the most good. Down with the methods that have been proven, by our forefathers, to be inefficient and unintelligent. It is absolute folly to maintain that the poverty stricken should be sent away from home to become the wards of

strangers; but the State should care for its own, and in the best regulated climate—for the reason of economy to the State and a blessing to the sick. It is highly essential that the incurables should be kept at home and the physician to whom such cases are sent should act promptly and not be the receptacle for the mistakes of others. Only such cases where a hope of arrestment is moderately certain should be accepted. It is not only a duty to cure the individual, but more essential to furnish examples of what can and cannot be accomplished in the treatment of this disease. In this way, the reaction on tuberculous patients in general will result in material good.

A second class, who by some sacrifices at home, can in a comparatively short time have their trouble arrested; so that, in the climate in which their health was restored, they may become a helpmate to their family and an asset to the community in which they reside. To the contrary, in a vast majority, there is the lingering invalid—a constant care to his family—or a corpse, in Heaven's name, which is better? The self-sustaining should and would avail themselves of all aids in the arrestment of this dread malady, if it were not for the advice of those who stand alone in the ability to advise. Confidence, thus undaunted, should be so highly esteemed that a hasty conclusion to follow a popular fad should be foreign to one's ideas. Gentlemen, it is too costly, and belittles the profession.

These remarks were gleaned from a viewpoint of vantage, and are not hasty, but the product of years experience, coupled with careful study and clinical observation of thousands of cases. Location might cause a hesitancy in giving such positive views, lest the inexperienced criticise, from the standpoint of an ultra motive; but, waiving such unfounded criticism, it is the duty of those who have the opportunity to observe, to give expression. Many are the horrible pictures portrayed by those failing to accept the advantages nature has so generously bestowed upon them. Climate, the best restorative that has been given to man, is indeed poorly appreciated. While delicacy, courtesy, and pride may deter praise from those who live in it and realize its true value, yet, within the heart of man there is a conscience, which outlines a positive duty to poor mortals with their hardships and troubles. It matters not whether personal appreciation of it varies, every man has his part to play, and it behooves us to sound the call loud and long, until the ears and attention of those indifferent to its merits have been reached.

Again, there are fundamental principles which should prove conclusively to any

reasonable mind, the fallacy of non-climatic influences in the restoration of health. Air may be comparatively a stable mixture but, remember, it is a vehicle in which a multitude of antagonists to health may be carried. Too much moisture is conducive to dissemination and innumerable ills to man. Too much dryness causes foreign bodies to be carried in the air, which act as irritants, especially in pulmonary tuberculosis. Wind and sun play an important role in climatic influences. Would it or would it not, be of importance to select a climate well proportioned in regard to humidity, rainfall, draught, winds, temperature, altitude and sunshine in the treatment of tuberculosis? Altitude is of paramount influence in these cases for the following reasons:

At sea level atmospheric pressure is sixteen pounds to the square inch, and one breathes sixteen times per minute. As one climbs higher, naturally, the air is rarefied and the pressure lessened, resulting immediately in an increase of lung expansion, thereby placing in use the unused. More lung expansion, more air inhaled, more oxygen supplied, more waste carbon dioxide removed. Lessening atmospheric pressure certainly lessens blood tension, increases transfusion, producing greater evaporation, and condenses the density of the blood and, as a result, aids greatly in removing congestion from congested areas. It would seem that all of these elements are invaluable in the arrestment of phthisis.

All agree that out-door-life is a most important factor. Why should not better results be obtained from a well selected climate, where there are the greatest number of sunshiny days, with neither extreme as to temperature? Again, the fighting forces of the body are constantly at war with the tubercle bacilli and their toxins, and it is simply a question of the "survival of the fittest." Is it not fair to conclude that more resistance can be had in a climate where there is most sunshine, fresher air, more even temperature and higher altitude?

It seems nothing less than criminal to keep these unfortunates in places where the days are sweltering and the nights so hot that restful sleep is almost impossible; when comfort, quiet, rest, and refreshing sleep can be had by the seeking. To force a patient to live in a climate where it is so cold and windy that he cannot live out, unless bundled to fatigue from excess clothing, or to live in a climate where heat is so excessive that his appetite is lessened and assimilation disturbed, needs no argument to an intelligent, receptive mind to convince him that this is a gross error and weak to advocate.

Removing a patient from a tenderloin

district in a crowded city, and placing him in a well constructed sanitarium, is taking him out of chaos, as to intelligent living, and is most certainly a decided change in atmospheric conditions. Is it fair to gather statistics here? If so, it can be only in degree. How much better would it be under these circumstances in an ideal climate?

At this point it may be interesting to quote from Solly's Analysis of 7795 Cases of Phthisis, which after years of study and painstaking gathering of statistics it was found that the percentage of those benefited in all stages were as follows:

Home treatment, taking England as a type, 29 per cent. Ocean climates, that is on water, 54 per cent. Island climates, 25 per cent. Coast climates, as for example the Riviera, 59 per cent. Lowland climates, 57 per cent. Desert climates, 63 per cent. Highland climates, 77 per cent.

Only a moments serious consideration would eliminate "Home Treatment," and, while such statistics are rare and necessarily indefinite, such a conclusion, after years of work in gathering the above information, should be of value and surely it is most trustworthy. What is gained by trying that which has been proven a failure? I would like to ask the advocates of "Home Treatment" if the lowest mortality rate is not found among the natives of the mountain cities? Again, have not these towns more than their pro rata part of the tuberculous sojourners, hence an increased liability to infection? How are these facts accounted for? Notwithstanding the ability to detect, at the present time, phthisis in its incipency and strenuously searching the highways and hedges for suspects—resulting undoubtedly in an increase of cases—the death rate has been reduced; and naturally it follows that such cases treated at home can be improved; but it is misleading and dangerous to conclude, under the circumstances, that "Home Treatment" is adequate.

It has been shown that the government would make a grand economic investment in treating her tuberculous. What is good for the government is good for the State. What is good for the State is good for the municipality. What is good for the municipality is good for the family. What is good for the family is certainly good for the individual. To reckon from a monetary basis is exceedingly mercenary, as compared to the loss sustained by those rendered so miserable and unhappy; but, from this standpoint, there can be no reckoning. So, in conclusion, it behooves us to give the tuberculous every chance for the arrestment of their trouble, and to insist—even from an economic point of view—that sani-

tariums should be erected in well selected climates, and that there could be no better investment until a specific is found.

Toxaemia of Pregnancy.*

By Dr. Houston B. Hiatt, Asheville, N. C.

In considering the question broadly, to my mind, pernicious vomiting, eclampsia and intoxication, appeal as a distinct toxic process, differing only in their various manifestations and probably in the intensity of the earlier processes.

I wish to direct your attention more particularly to that departure from normal of which we speak as "Toxaemia of Pregnancy." There is a mental habit among us, bred of early training, to regard eclampsia as a distinct entity and loose sight of the fact that it is just as much a "toxaemia of pregnancy" as any other of the forms of intoxication. I might add that the same holds true for hyperemesis gravidarum. So to be more exact in my nomenclature I would not speak to you of one particular phase of the condition as "Toxaemia of Pregnancy" and disregard (in the naming) the toxic ailment in these other conditions. For "Toxaemia of Pregnancy" as meaning those early stages in which are first experienced the symptoms arising from a disordered metabolism I would suggest "The Mild" or "Lesser" as an addition which would point specifically to the toxic conditions usually preceding eclampsia and the more severe poisonings, and which may or may not grow progressively worse and end in eclampsia.

As with the etiology of hyperemesis and eclampsia, opinion is much divided as to the organ or organs primarily at fault in this toxaemic process. The French, led by Bouchard and others, consider the liver the organ at fault primarily. On the other hand, the Germans place the blame upon the kidneys, claiming that the kidney is affected by the alteration in the arterial tension incident to pregnancy.

Be this as it may, it behooves us as general practitioners not to lose sight of either organ or any of the other excretory organs would we prevent these toxaemias. However, since we may, through the same medium—the urine—look to both these organs, it is not amiss to discuss just here, briefly, the two views. The products of the foetal metabolism—whatever they may be—are carried to the maternal blood stream through the placenta and in part to the liver; after oxidization here, they go to the kidneys along with the maternal excrementitious matter.

Williams states that in the toxaemic conditions hepatic changes are found similar to those found in eclampsia, but less marked, consisting of thrombotic process, points of focal necroses and hemorrhages. The inference of the French being that under such circumstances the metabolism of the liver is so interfered with that certain toxic substances ordinarily rendered harmless by the liver give access to the blood.

The role of the liver in preventing toxaemias and intoxications may be readily seen by the fact that grave uremic symptoms develop in dogs in whom an Eck fistula has been made. Whereby the vena porta is made to pour its contents into the vena cava so the blood coming from the intestines does not pass through the liver at all. Blouchard says that as long as these animals live on a diet consisting of bread and milk they do all right, but upon a meat diet they become sleepy, convulsed and comatose.

I have discussed elsewhere, the role of toxaemia in renal lesions and have shown that intestinal toxaemia is often a cause of nephritis, either directly through the toxic content of the blood stream or by the hypertension that exists in these cases, or both, whether they be of intestinal origin or the result of a normal metabolism in pregnancy.

If the renal changes were primary we would undoubtedly see evidences in the urine—albumen or tube casts—preceding the hypertension or concomitant with it. But the reverse has been, in my experience, the rule. During routine examinations while the urine showed neither albumen or casts I have found arterial hypertension existing. On the other hand, this hypertension has always been associated with putrefactive products in the urine. Indol, skatol, urobilin, etc. I have shown in an article published in Archives of Diagnosis, that in the hypertension existing with autointoxication the primary effect of the toxins causing the rise in blood pressure is exerted upon the portal vessels and from the increased local rise of blood pressure here there results the general hypertension.

In a toxaemia of pregnancy we would get practically the same effect exerted upon the same nerve ending, the only difference being one of quantity. In intestinal toxic conditions more toxic products reach the portal circulation in a less diluted form.

For these reasons, brief and imperfect as they are, it has seemed to me that the liver is primarily at fault, and I have therefore taken as my indication for interference the products of imperfect liver metabolism in the urine rather than waiting for albumen, tube casts or a marked diminution in urea.

*Read before the recent meeting of the Tri-State Medical Association at Columbia, S. C.

By interference here, I do not mean necessarily instrumental procedure or measures calculated to induce abortion. There are instances where these are indicated. But I refer more especially to those cases needing medicine, baths, exercise and diet.

In all pregnant women there is at all times a certain amount of indican, at times urobilin, and in one instance I have found acetone not associated with glycosuria. It is by keeping close watch on these bodies that the toxæmias are to be prevented for they appear in the urine earlier than the products of renal insufficiency. Given a case of headache, lassitude, some loss of appetite, constipation with heavy indican reaction we have the first stage of a toxic condition, and taken here it can usually be cleared up and probably an eclampsia prevented. I say probably, for in some instances in spite of all treatment eclampsia will supervene; and this lends weight to the idea that eclampsia is the resultant of more causes than one. But in view of the facts adduced regarding the hepatic changes in the two conditions it is certainly apparent that the liver plays some part and that, most probably, an important one.

Usually in this first stage a small dose of calomel followed for two or three days by salines (personally I prefer magnesium citrate) will clear up the trouble. However, does it not, then we must resort to restrictions and limitations in diet, employment of hydrotherapy and other measures. These often fail.

This first stage passed and the condition having become so grave that we find no response to our simpler remedies and measures it is then that we begin to see the products of renal changes appearing in the urine and a more marked arterial hypertension. This is the class of cases in which palliative measures are of little avail and the only things left are radicalism or delay.

Delay usually means only one thing, carrying our patients along by various means to the end, and as a grand climax eclampsia supervening just before or during delivery. On the other hand, by employing radical measures when the condition gets beyond our control, while we lose a child, we save a mother. Not only save her life in this instance but give her in all probability a guarantee of a future conception. In the hurried, rapid deliveries of eclamptic women the cervix and perineum are lacerated in practically every case. In a large percentage of these cases the cervical tears are left to unite as best they may and the perineal tears are brought together any old way to get them united. The result is an endocervicitis and a weakened perineal support. Both factors in sterility.

1. Indicanuria; *Old Dominion Jour. Med. and Surg.*, Sept., 1909.

2. Arterial Hypertension; *Archives of Diagnosis*, April, 1911.

Eulogy on J. Marion Sims, A.M., M.D., LL.D.

By Wm. Lane Lowder, B.S., M.D., Tipton, Ind.

PROEM.

Doctor Sims: which of the gods gave thee
The art to spin from Fancy's lines a ray so
light,

That by some law of science is cast by thee
Across the broad expanse of Surgery's Night?
A ray through Gynecology's uncharted sea,
Then to a distant point made firm and tight.

A line thou traced beyond the sea and
mound!

Who was it taught thee to define, compare,
Adjust, survey and straightway SOUND
That master line through trackless air?

How infinite, thy boundless realm PRO-
FOUND!

How pure thy generous faith and care!

Uncertain I grope in the silent dust,
While firm and sure you thread with trust,
Your pathway in the azure of the skies.
BRAVE SURGEON! Thou wert surely
wise.

Ah! what DESTINY withholds from me
The law which lies unhidden from thee?

L'ENVOI.

Now could I spin from toil and tears,
A subtle thread, invisible to cast
Across the "reaches" of the years;
Then, I too, might hold and anchor fast.

BIOGRAPHICAL SKETCH.

James Marion Sims was born in Lancaster Co., South Carolina, January 25, 1813. Graduated with the degree of Bachelor of Arts, from the "College of South Carolina," in 1832. He graduated in medicine from the "Jefferson Medical College," Philadelphia, in the class of 1835. Located and began practice at Montgomery, Alabama, in the year 1836. Opened a private hospital there in 1848; there experimented with a view of discovering a cure for vaginal fistula; which was until his time considered incurable. In 1849, he succeeded in its permanent cure. He also invented a number of important surgical instruments, including the Sims' Speculum and Sound; which have become widely adopted on both sides of the Atlantic. In 1853, Doctor Sims organized the Woman's Hospital Association in the City of New York. Subsequently the Association received a charter from the N. Y. legislature, a block of ground from the city, and an appropriation of \$10,000.

About this time, Doctor Sims visited Europe to investigate Hospital Construction. He was impressed with the "pavilion system," and secured its adoption in New York City. He again went to Europe in 1862, but so urgent was the invitation for him to practice abroad, that he did not return to the United States until 1868. He visited Europe a third time in 1870, and was Surgeon-in-Chief at the battle of Sedan, after which he personally treated Marshal McMahon, who was there wounded. Doctor Sims published a technical work and a volume containing his Life. He died in the City of New York, November 13th, 1883; after having reached that age, so graphically described by the Psalmist.

JAMES MARION SIMS:

"Thy name shall be forever bright,
When sun and stars are set in night."

From this synopsis we now proceed to give more fully his characterization.

Professor Swinton, one of the *literati* of this country, said that PROSE has its RHYTHM as well as POETRY, only artificial and more varied. The following elegant passage from DeQuincy paid to the genius of a member of our guild is interesting as in itself a beautiful illustration of rhythmic prose:

"Where, out of Sir Thomas Browne, shall we hope to find music so Miltonic, an intonation of such solemn chords as we struck in the following opening bar of a passage in the URN-BURIAL:

Now since these bones have rested quietly in the grave, under the drums and trappings of three conquests, etc. What a melodious ascent of a prelude to some impassioned requiem breathing from the *pomps of the earth* and from the *sanctities of the grave!* What a FLUCTUS DECUMANUS of rhetoric! Time expounded not by generations or centuries, but by vast periods of conquests and dynasties; by cycles of Pharaohs and Ptolemies, Antiochi and Arsacides! And these vast successions of time distinguished and figured by the uproars which revolve at their inaugurations—by the drums and trappings rolling overhead upon the chambers of forgotten dead—the trepidations of time and mortality vexing, at secular intervals, the everlasting Sabbaths of the grave!"

It was said of Euripides that every verse was a precept; and it might be truly said of Dr. J. Marion Sims that from his *life and works* may be collected a "system" of *civil, scientific and economical* prudence. Though *The sand* by one flood heap'd and pil'd,
Is by anoth'r scatter'd far and wild;
Yet the *rock* remains forever firm and fast,
And in its place continues to the last.

INTRODUCTION.

He has heard the dip of the golden oars,
And caught a glimpse of the snowy sail;
For none return from those quiet shores,
Who cross with the boatman dark and pale.

The respectful, nay, reverential spirit that prompted the people of classical Greece to pay tribute to the great characters of the Past and to surround the memory of heroic soldiers, statesmen and more particularly famous poets, and philosophers, with all the glamour of a mythical cult and worship, was typical of ancient culture and civilization. It is this *pride* in the traditions of the past and in the struggles and achievements of the great men *gone by*; that is the rock upon which the self-conscious spirit, the self-respect, the national pride of republics, kingdoms and empires rest. It is the *soul*, the life-element of patriotism. Only barbarians have no love for the ideals that are embodied in the traditions of their tribes and races!

Who, that has seen, it has not been inspired by the sight of the statue of James Marion Sims, M.D., in the City of New York? The incessant clatter and grind of a thousand hoofs and wheels of industry and commerce that accompany a city's mad chase for the Almighty Dollar, can not drown the voice that speaks so eloquently out of the wan countenance of that heroic man, whose *whole life* was consecrated to the alleviation of his "silent sisters in humanity"! To gladly listen to the voices that faintly reverberate through the "*aisles of time*" and tell us of the heroic *past*, to try and understand the language of the great souls that speak to us out of the "musty tombs" and "crumbling monuments" is a form of education that makes us better understand and more deeply appreciate our own purpose in life. It is proper and profitable for every true American to seek his ideals in the lives of such models as Washington and Franklin. Every physician who ministers to the sick bodies of his fellowmen, can peer through the "*mists of time*" and be inspired at the *sight or sound* of such *names* as Sims, Vandell, McDowell, Palmer, Drake, Flint, Gross, J. Lawrence Smith, Henry Miller, Jedediah Cobb, Elisha Bartlett, Charles Caldwell, R. O. Cowling, James W. Holland, Theophilus Parvin, E. S. Gaillard, Hunter McGuire and a host of others, that stand forth *brilliant* on the pages of medical history of the country in which they *lived, wrought and died*. SIC SEMPER GENUINES. To *live and appreciate* the Past means to *secure* the Future.

As age stealthily creeps upon us, we become garrulous and take a fancy in revivifying the memories of those who participated

in the scenes and times gone by. As we grow older we live more in the Past than in the Future. There is no period of one's life to which his mind so *often* and so *fondly* turns, as his *school days*. As we reflect on the *shortness* of human life and the *multitude* of all things on earth, a peculiar feeling—a kind of sweet *melancholy*, as it were, steals into our hearts. There is a constant changing of nature's beauties—a moment since a little cloud encompassed your mountain-top, dark and gloomy in appearance; but a flush of sunlight falls upon the uncouth form, and alas! it is changed to a glorious vision of purple and gold. May not this be a type of the *time* when the Sun of Righteousness shall kindly look down upon the dark, degenerate children of earth, changing their gloomy life into a bright and beautiful one, in the "Land of the Hereafter." The best critic, the most impartial judge, the final tester, and the most ruthless and merciless destroyer is *Time*. Nothing lives long unless it embodies *real* merit and value. All weak things inevitably die in the long run. The *gauntlet* which *Time* throws down for each and every human thought, word and deed before it can be said to be permanently established in history, (science and art and in the world's remembrance), and before it can have any active and abiding influence in determining future thought, is a fearful one. Ranged on the one side are all the natural forces and processes of decay, dissolution and disintegration; which are inherent in all things, and actively at work; and on the other, stand all the prejudices, harsh judgments and fierce accusations of contemporaneous *rivals, critics and enemies*. And anything which survives the thrusts of these *two foes*, must have in it a portion of *indestructible* worth. We speak in metaphor of the "wrecks of time"; but this metaphor rests upon a *basis of the most literal fact*. The pathway of centuries through the domain of history is a *real* path. Passing along this track, one can see on *either* hand the ruins of *projects, plans, hopes, schemes, and enterprises* of various kinds, thickly strewn about as *leaves in the autumn woods*. They gave good promise at the *outset*, they started *well*, but the "victorious tooth of *TIME*" tore them into fragments; and they disappeared from the active arena of life, like the "unsubstantial pageant of a dream." Still, this *test of time* is not an absolutely impartial one after all. For *time* destroys some valuable things in its ceaseless flow; just as the current of a river sweeps away houses, barns, and cattle on its banks; as well as all rubbish and floating *debris*. If any human enterprise serves *well* its *day* and *generation* and is calculated for that,

only, of course it will perish with the using and pass away.

BOYHOOD.

"From every lowly cottage roof,
However poor and brown,
From every dusty hovel points
A HAND at glory's crown."

Thus on the classic banks of the WATEREE RIVER stood the early cabin of the boy—MARION SIMS; and from its lowly roof pointed the HAND, that at last, seized GLORY'S CROWN.

There lies upon this side of the broad Atlantic, a beautiful "COMMONWEALTH," famous in history: story and song. Its area is *not* as great as that of Ireland, and its population is many times less; *yet* it has given to the world *more* than its share of *genius* and of *greatness*. It has from its earliest history been prolific in statesmen, warriors, orators, poets and physicians. Its brave and generous sons have nobly fought in all of *life's* battles. In *wit* and *humor* it has scarcely ever been surpassed; while its SONGS like its STORY moves to *smiles* or *tears*, by its *sweet* but *melancholy* pathos.

Into this fair region, God has seen fit to send *one* of all those fearful MINISTERS, that fulfill His inscrutable decrees—*ghastly, grim-visaged war*, and the plains of SOUTH CAROLINA were moistened by the blood of her best citizens. Her noble spirits were jarred in their melody, the rude hand of FATE swept o'er the harp strings, and like

"The harp that once in Tara's halls
The soul of music shed,
Now hangs as mute on Tara's walls,
As if that soul was fled"—

black, smoking ruins marked the places which had been the habitation of her children. Driven from their homes into the gloomy and dismal swamps, even then the spirit of liberty survived, and South Carolina, sustained by the daring deeds of her SUMTERS and her MARIONS, proved, by her conduct, that, "though her soil might be *overrun* and *reddened* by the blood of her best citizens, the *spirit* of her people was *invincible*." Never were there exhibited, in the history of the world, higher examples of *noble* daring, *dreadful* suffering, and *heroic* endurance, than by the "*whigs*" of South Carolina, during the Revolution. The whole commonwealth, from the *mountains* to the *sea*, was overrun by an overwhelming force of the enemy; and the products of their toils perished on the spot where they were produced; or were consumed by the *relentless flames of the foe*. No *sacrifice*, however great, but she *cheerfully* made, and no *service*, however arduous, did she ever *hesitate* to *gladly* perform. In

prosperity an *adherent*, and in *adversity* she has clung "closer than a brother." During the "dark days" of "1776-'83" the "call of the country" was to *her* as the voice of HIM, "who hears the young ravens when they cry." *Domestic and internecine* discord "ceased at the sound;" every citizen became at once reconciled to his brethren; and the sons of the Palmetto State were all seen, crowding to the temple, offering their gifts upon the altar of their common country. Not a syllable of reproof ever fell upon the fair *escutcheon* of her history, nor can ever darken the "halo" that gilds her memory, for the self-sacrificing *duty* and *devotion* done during the soul-trying times of the Revolution, and they

"Who in LIFE's battle firm doth stand,
Shall bear HOPE's blossoms into the SILENT
LAND."—*Von Salis*.

Grecian history informs us that the *monument* raised over the graves of the fallen Spartans bore the following inscription:

"Go traveler, and tell at Lacedaemon,
that we fell here in obedience to her laws."

Sacred history teaches us concerning THE FALL OF MAN, that the *first* man and woman, Adam and Eve, were created in a state of innocence and holiness, and endowed with super-natural gifts. Had they *persevered* in holiness and obedience to God, they would have *always* been happy in this life, and *after* their "*period of probation on earth*," they would have passed, without DYING—body and soul to the enjoyment of *everlasting* glory in heaven; but as a *consequence* of "having *sinned*" against their CREATOR, they *forfeited* for "*themselves*" and for "*all their posterity*" the *sacred* right to eternal happiness—*lost their innocence and holiness*, and thus were doomed to SICKNESS and DEATH. Ah, FLEETING SPIRIT! WANDERING FIRE:

"That long hast warmed my tender breast,
Must THOU no more this frame inspire,
No more a pleasing, cheerful quest?
Whither, ah, whither art thou flying?
To what dark, undiscovered shore?
THOU seem'st all *trembling, shivering, dying*—
And WIT and HUMOUR are no more."

By *one* man, SIN entered into the world, and by SIN, death; and so *death* passed upon ALL men, in whom ALL have sinned.—Romans v:12.

Thus in consequence of ADAM'S SIN, are all men doomed to sickness, sufferings, and labor in this life. In ADAM the "*whole human race*" (so we are told) SINNED, and therefore ALL men are doomed to DEATH—"for the wages of sin is death" (Romans, vi:23). Not one ray of hope could penetrate the darkness in which sin had envel-

oped him, till God, in His infinite mercy, promised a REDEEMER:

"Four thousand years men waited,
Four thousand years men prayed,
Four thousand years the nations sighed
That their KING so long delayed.

"But still the SAVIOUR tarried
Within HIS FATHER'S home,
And the NATION's wept and wonder'd
Why the PROMIS'D had not come.

"At last earth's hope was granted,
And GOD was a child of earth,
And a thousand angels chanted
The lowly midnight birth."

—*Patrick Ryan*.

MANHOOD.

THUS WAS J. MARION SIMS—an *apostle of mercy*.

Scientific *altruism*, as exemplified in the life and work of many a European scholar, is a phase of human existence that seems to have no place on American soil. Science for the sake of science, knowledge for the sake of knowledge, without the expectation of returns in *silver* and *gold*, is a species of philosophy that Americans ordinarily classify under the head of a *mental aberration*—a more or less *advanced* stage of *lunacy*. Scientific altruism, nevertheless, is the purest and most exalted form of human freedom. And yet, with just a *few* exceptions, it is *foreign* in the "*land of the brave and the home of the free*." Oftentimes we *rant* and *rave*, shouting "the *battle-cry of freedom*" and amid all the *glamor* of our free institutions and the *clamor* for *human ideals*, many an "*apostle of liberty of the mind and freedom of the soul*," remains a slave to the lowliest forms of servitude. Abject poverty is the grim master of his body until the enshackled soul is liberated by the hand of death. Such, however, was *not* the LIFE HISTORY of J. MARION SIMS, known and honored on *both* sides of the Atlantic. Practicing as a "country doctor" at Montgomery, Alabama, between the years 1836 and 1848, he began experimenting upon *negro women*, (slaves) with a view to, if *possible*, discover and perfect a *permanent* cure for *Vaginal Fistula*; which had been until *this time*, considered *incurable*. After much hard labor, under trying circumstances—including many *privations of body, and vexations of soul*, he at last (1849) SUCCEEDED; and his name has been inscribed on the pillar of FAME just *beneath* that of the illustrious EPHRAIM McDOWELL, of Danville, Kentucky. The following beautiful lines, written as a tribute to the memory of the departed—"the immortal surges"—were taken from the

scrap-book of a MEDICAL FRIEND, [thirty years, or more ago] now deceased. During all these years I have never been able to discover the *author*, who will forgive me for thus helping to make *his* (or *her*) unknown *name* blessed among all PHYSICIANS and NURSES who may chance to read this elegant product of GENIUS:

"CHIRURGIA'S TOWER! thy lights resplendent blaze,
Dries woman's tears and lengthens out her days.
McDOWELL and SIMS, of our COLUMBIA'S clime,
Began the work, moved onward, nigh sublime.
For woman, then, these blessings shall be given,
QUEEN of the HOME, and HOME the TYPE of HEAVEN."

Thus another poet pays tribute at the SHRINE OF GENIUS:

They *both* have long since passed away
Their hands are crossed, their lips are closed,
The dust been o'er them strown
The drifting soil, the moldering leaf,
Along the sod has gently blown;
Their mound has melted into earth,
Their MEMORY only, lives alone.

—Holmes.

ONLY AWAY.

With a cherry smile and a wave of the hand
They have wandered into an unknown land,
And left us dreaming how very fair
It needs must be—since they linger there.

—Riley.

There is no need of "storied urn or animated bust"; the world at large is indebted to him for the advancement of SURGERY and the perfection of its operations is his immortal monument.

Alas! let us visit the old church yard,
We'll follow the path thro' the soft green sward;
McDOWELL and SIMS slumber there,
whom we regard,
We'll trace out their names in the old church yard;
Oh, mourn not them, their grief is o'er
Weep not for them, they weep no more,
For deep is their sleep, tho' cold and hard
Their pillow may be, in the old church yard.

McDowell and Sims linger there in calm repose,
Released from all earthly bereavements and woes;
And who would not rest with the friends they regard
In quietude sweet, in the stillness of the old church yard?

When *beauty* shall spring from the *prison* of clay:
When GABRIEL'S *voice* and the *trump* of the LORD
Shall awaken the DEAD in the OLD CHURCH YARD.

L'ENVOY.

"They at last reached the pure Empyrean;
And robed in immortality Elysian"—
sit on celestial thrones triumphant,
"Built beyond mortal thought,
Far in the unapparent."

—P. B. Shelley.

South Carolina is justly proud of her orators, statesmen and soldiers—the Laurenses, the Rutledges, the Pinckneys, the Sumters and the Marions, she has given to the world; and their names are indelibly linked with the Revolution. To arms she has given a Hampton, a Brooks, a Branch, a Bee, a Pickens Butler, a Gadsden, a Gladden, a J. Bond Ion, Lawrence M. Keitt, Thomas Lynch (a signer of the Declaration), a MacDuffie and a Ramsey. To poetry she has given the following muses: Thos. S. Grimke, William Gilmore Simms, and Henry Timrod. To medicine, before the Revolution, South Carolina had freely contributed, and the period of her *colonial existence*, comprised some *eminent physicians*, prior to the Revolution. From an old *Cyclopaedia*, published in the year 1849 by Doctors Forbes, Tweedie, and Conolly, and thoroughly revised by Doctor Dunglison, (b. Cumberland Co. England, Jan. 4, 1798; a graduate in medicine from the "University of Erlangen," Germany, in 1823), Professor of Institutes of Medicine in "Jefferson Medical College," Philadelphia. Doctor Dunglison says: that of the colonial physicians *none* were more active or distinguished than *those of South Carolina*.

In 1734 a native of this State, William Bull, obtained a degree in medicine at the University of Leyden. He had studied under Boerhaave. He was called the *learned* W. Bull. In 1749, John Moultrie received the degree of "doctor in medicine," at the University of Edinburgh. He was the first native Carolinian who obtained the honor at that university. According to the historian, ten other native Carolinians obtained this same honor, between the years 1768 and '78;—"Ramsey's Review of Medicine in the 18th century."

"Next to Boston, Mass., we find the physicians of Charleston, S. C., the first to accept and practice vaccination for the prevention of small pox. This practice took its origin as far back as 1736. So early as 1738, it was practiced in Charleston, during the epidemic of small pox, which then

prevailed there. Lionel Chalmers, another eminent South Carolina physician deserves mention in this connection. He also published a valuable work on the weather and diseases of South Carolina, 1775. An essay on *Opisthotonus* and *Tetanus*, as early as 1754 appeared by him.

"Charleston furnished another eminent physician of this period, namely, Dr. Alexander Garden. As a proof of the high esteem in which he was held, it may be mentioned that Linnaeus, with whom he corresponded in Latin, gave the name "Gardenia" (in honor of him) to "one of the most beautiful flowering shrubs in the world." "He was a member of the Royal Societies of Upsal and London."

—"*From Essays*," Caspar Wistar, M.D.
(Born 1761-Died 1818.)

The monument raised over the graves of the Spartans, bore the following inscription: "Go traveler, and tell at Lacedaemon, that we fell in obedience to her laws." America's pioneer physicians, of which J. Marion Sims—the peer of *any*—have long since joined glad hands in that far-off land:

"Where brighter suns dispense serener light,
And milder moons imparadise the night;"

and South Carolina is justly proud of her statesmen and soldiers; but their *fame* shall at last succumb, grow faint with the coming ages, while *that* of this "village surgeon," like the ever widening waves of the inqiolate sea, shall be wafted to the utmost shores of time, hailed alike by all nations in all ages for having *lessened the burden* and *prolonged the span* of human life.

AGE.

When old Father Time around our brows
serene,
Shall gently twine at last his soft and snowy
wreath.
Let visions bright of many a long-forgot'en
scene
In mem'ry 'rise to stay the hand of Lethe.

In speaking of age Lord Byron says:

"What is the worst of woes that wait on
age?
What stamps the wrinkle deeper on the
brow?
To view each loved one blotted from life's
page,
And be *alone* on earth, as I *am now*."

Strength of thought and expression are often *blended*, as beautifully expressed below by Pope and Voltaire.

"John the Baptist was the *percursor* of Christ," is a plain statement, but what does it become as expressed by Pope!—

"Hark! a glad voice the lonely desert
cheers,—

Prepare the way; a God, a God appears!"

In my student days, I vividly remember a motto as follows:

Epitaph on a Physician:—"He *poured* drugs, of which he knew *little*, into a body of which he knew *less*."—Voltaire. But probably had the Frenchman been writing concerning the "twentieth century" doctor instead of the "seventeenth," he would thus have written: "He *injects* (hypodermatically) the *active principles* of drugs, of which he knows *much*, into a body of which he knows *more*." Medicine has within recent years, as Sir Henry Grattan said of Lord Chatham, "struck a blow in the world tha. has resounded through the universe," and thus will it remain until that last day:

"When the skies are shrivell'd like a burn-
ing scroll,
And one vast common tomb ensepulchers
the world!"

Truly can it be said of America's nineteenth century physicians: He did that which his strength and the limitations of time permitted; and he

"Who in life's battle firm doth stand
Shall cear hope's tender blossoms
Into the realms of the Silent Land."

—*Von Salis*.

IN MEMORIAM.

J. MARION SIMS [in his mind's eye]
could see,
As a citizen of Athens, in the time of
Pericles.
Could listen to the great orators, sacred and
profane,
As they, their wit and eloquence, eagerly
did proclaim.
Could sit upon the cliffs of the Mediter-
ranean,
And hear the "multitudinous laughter" of
the ocean.

He saw great Socrates thrust Question's
mighty spear
Through Falsehood's *fickle* heart, and Treason's
artful ear.
Present, was he, when that stoic in wisdom
great,
"Poison"—Hemlock drank and calmly
awaited his fate.

Met Night's chill death, its woes and warn-
ing,
Tranquil—quiet, as "star meets morning."

He listen'd to the philosophers, peripatetic,
And unpuzzled remain'd in, knowledge
didactic.

Phidias and Praxitiles:sculptors Athenian—

He saw with wonder and feelings, Elysian.
Chisel shapeless stones to beauty's Heavenly
form—
Types of love, and hate, and fury and storm.

He liv'd beside Egypt's myster'us river
Nile;
Amid its mighty vast and wondrous Pile.
He knew and felt every deed and thought
That the form and face of the sphinx had
wrought.

He heard great Meunon's morning song
Whose marble lips by sun were smitten hard
and long.

Laid down as 'twere, with the embalm'd
and saint'd dead,
And felt, within their dust, delight and awe,
not dread:

The expectation of another life, in the un-
known, beyond—
With cold and suffocating doubts—alas!
not found.

Men that are born of *chalk* and *clay* and
long *delay*,
The *children of quick* and *certain* and *sure*
decay.

SIMS, as 'twere, walk'd the ways of an-
cient—mighty Rome;
And saw great Caesar cross the Rubicon—
the Rhone;
And with his legions in "battle array" fall
thick and fast—
The vanquished of a mighty race—warrior
of the historic past.
He stood with vast and motley, bold and
mighty throngs,
And heard the clash of arms—war's alarms,
and sound of gongs.

He watch'd the trials and triumphs, of
mighty men and mighty things,
Follow'd by an "endless chain" of un-
crowned rulers and kings—
The captur'd hosts from near and from afar;
And all the spoils—the plunder of a ruth-
less war.

He heard the song and shout arise and fall;
That shook the Coliseum's roofless wall;
When from the reeling gladiators hand
The *short-sword*, at laet, fell;
While from the breast of *hate* and *strife*
Gush'd the crimson "stream of wasted life."

He liv'd as 'twere, the life of savage men;
He trod the forest's silent glade and glen,
And in the desp'rate game of life and death,
He matched his thought 'gainst the instinct
of stealth.

He knew all crimes and all regrets,
All virtues and their rich assets.
Could be victim and also be victor,
Could be pursu'd and yet be pursuor.
Could be outcast, and could be king;

Had sipp'd the sweets, and felt their bitter
sting.

He heard the applauses and the curses;
Of all the world—the patients and nurses—
And on his heart had fall'n the impresses
Of Nights and Noons of failures and
successes.

He felt the thrill and ecstasy of love,
As borne above, upon wings of the turtle
dove—

The savage joy of hatred, envy and finite
power,

That come and go—return and disappear
within an hour.

He heard the *hiss* of envy's snakes
And watch'd the eagles of ambition soar
There was no "Star of Hope" that fail'd to
shed

Its "ray of promise" 'bove and o'er his
head.

No joy that settled not its grace,
Like sunshine eternal upon his face;
"But *love* nor *joy* nor *hope* nor *fear*
Have left *one* trace of *record* here."

He knew as 'twere all the unspoken thoughts,
The dumb desires—the *aughts* and *naughts*,
The *wants* and ways of *bird* and *beast*,
Saint and *sinner*, *church* and *state*, *nun* and
priest.

He felt the crouching tiger's piercing neigh,
And all the terrors of the ambush'd prey;
And with the "King of birds" the azure
dared—

In ecstasy of flight and poise, and swoop—
uncompared.

He could with sluggish serpents, lay at ease,
On barren rocks of mountains and the seas.
Uncoiling *slowly* in the *heat* of *sun* and *noon*,
Or coiling *fastly* under *cold* of *night* and
moon.

Beneath the Bo-trees contemplative shade
he sat,

Wrapp'd in Buddha's mighty and mys-
terious thought;

And dream'd all dreams that light—the
alchemist,

From dust and dew, clod and cloud, rain
and mist—

Had stor'd within the slumb'rous popie's
blood,

Before and since, the Ark on Ararat, rest'd
from the flood.

Could kneel at every shrine with dread and
awe

Off'r ev'ry sacrifice, prayer and song and
law;

The consternation felt and the shuddering
fear,

Mock'd and worship'd the gods far and

near—
Will live as long as suff'ring manhood
dwells,
Within this land of death and fun'ral knells.

Enjoy'd all heav'nus and felt the pangs of
ev'ry hell,
From "Jordan's stormy banks" to "Ca-
naan's peaceful dell."

He liv'd all lives, yet bold in virtue's cause
he spoke,
Though gentle harm'ny, ne'er disturb'd
nor broke.

This pleasing, anxious being, he at length
resign'd,
"Nor cast one *longing, ling'ring look* be-
hind."

We cast our *distant gaze* far in the "*misty
blue*;"

There gentle love still strays, *there dwells*
still *rapture true*.

There birds earliest go, with plumes of
golden light—

There swelling violets blow, 'round sunny
foliage bright.

There other moons had birth, and many a
beaut'ous sun;

When he had gained the earth, whereon
life's race was run.

A thousand fold his ("silent voice") mighty
song has pealed

In woods, on mountains cold, in bushes in
the field.

To farther India's clime, the blessings
gladly bear—

J. Marion Sims, the rose of Sharon, planted
there!

"What needs J. Marion Sims: his bones
The labor of an age in piled stones,
Or that his hallowed relics should be hid
Under a star-y pointing pyramid?

"Dear son of memory, great heir of fame,
What need'st thou such weak witness of
thy name?

Thou in our wonder and astonishment
Hast built thyself a *live-long* monument:

* * * * *

And so sepulchred in such pomp dost lie
That *kings* for such a tomb would wish to
die."

Physician and patient, painter and sitter,
a shadow of a shade, in sweet serenity
looks forth from out the dull-timed "frame
of years"—how wondrous fair, beauty with-
out a name! Only a soul as fair as they
has passed away, and memories alone re-
main. Never there, a syllable of reproof,
ever fell upon the fair escutcheon of his life,
that can darken the halo that surrounds his
memory; and as we hear the distant moan
of that vast ocean all must sail so soon—

that must waft us into ports unknown, be-
yond the chill of night or heat of noon, that
he *lived* and *wrought when* and *where* did:

"And while fond memory back shall steal
To *scenes* and *days* forever fled;
Oh, let the veil of love conceal
The frailties of the sleeping dead."

For the same hand that kindly, lightly,
gently leads us here; through scenes most
dark and drear, will transport us beyond
the vale of doubts and fears, and hope, it-
self in that far distant clime, will find the
unknown quantities of time:

Then come, my brother, give me your hand,
We'll build a mountain and there we'll
stand;

And as the snow flakes to drifts are made
And grains of sand, on hill and vale are
laid:

Leaves become a pleasant shade—
Dew drops the fountain made.

L'ENVOI.

* * * * *

We were, we know not why begot,
We are, while here, we know not what,
We go, at last, we know not where;
For why and what and where and when—
Ambush'd, lies, beyond our mortal ken.
But we'll think of him faring on as dear
In the love of there as the love of here
For if we're alright here, we'll be so there.

AN APOSTLE OF MERCY.

Joseph Mazzini, moving among his kind
like a sunbeam from the first glow of the
morning and laughing amidst the frowning
rocks—his character radiant with love and
sympathy, and paling the blaze of beauty
which Nature had kindled in the gardens
of his native Italy; Father Mathew, with
his great heart full of sunshine; John How-
ard, so full of heaven that he left it glow-
ing in every foot-print he made; Florence
Nightinnale—one of the "silver links" that
chain the Earth to the beautiful Yonder—
"the sweet flower" blooming among the
briars; and our own James Marion Sims—
the Apostle of Mercy; are a "few stars" in
the sky of today, whose azure background
is ablaze with a confluence of radiant spots
of philanthropy and fraternal love to all
mankind. Down deep in the human heart
there is a love for kindred humanity! Some-
times we may not realize it ourselves. But
it is there; it burns like fire in the open grate
in midsummer—glows like the summer's
sun at noonday; and is as charming as the
radiance of love can make it. Fraternity
is not circumscribed. Love is universal;
and culture has kindled the embers of
brotherhood into a quenchless flame, and

in its sweet warmth heaven plays about every heart, glows in every pathway and illumines every home. Doubtless there are homes in which the sunbeams never, or scarcely ever, enter—to laugh and play—the shutters are kept barred; the curtains are never raised. Floods of sunshine without are ever trying to melt their way in but never succeed. Love is as free and brilliant as the light of noonday, and bubbles in the heart like a never-failing spring upon the mountain top. From the hill-tops the birds mingle their music with the soft throbbings of the human heart and the melodies of angelic choristers, and love's harmonious strains fill the valleys of the fields and trill through the arches of the universe; on the flowers and crystal streams, in the morning's daybreak and the evening's twilight, twinkling in the sweet light of the stars and in the gentle laughter of the moon, on all nature: animate or inanimate, there is the gentle reflection of the joys and smiles, and the divinity of love.

The human race (of which J. Marion Sims acted such a conspicuous part and as a sequel thereof) is living in the vestibule of heaven—in the garden of perpetual bloom and brilliancy; and he and his companions (co-laborers)—(McDowell, Drake, Parvin and Holmes) now tread the palace of the sky:

“And there above the circle of the moon
Did ever night behold so many stars?”

To seek a newer world in distance far,
He cross'd at last Great Ocean's moaning
bar.

Follow'd knowledge beyond the night and
noon:

Beyond the rays of sun and folds of moon.
Follow'd like a star sinking into space:

“Beyond the utmost bound of time and
place.”

To Sims, to all, “the common lot”
Of mortals lies in “Lethes dark wave”;
Yet some shall never be forgot—
“Some shall exist beyond the grave!”

The rolling seasons pass away,
And Time untiring waves his wing;
Whilst Honor's laurels ne'er decay.
But bloom in fresh unfading spring.

“All, all must sleep in grim repose,
Collected in the dark and silent tomb;
The old and young, with friends and foes
Fest'ring alike in silks and shrouds con-
sume.”

“The mould'ring marble lasts its day,
Yet falls at length an useless fane:
To ruthless fangs becomes a prey—
The wrecks of pillar'd pride remain.

L'ENVOI.

“Let us not say: the common lot
Of all lies in Lethe's wave!
Some few who ne'er will be forgot,
Shall burst the bondage of the grave.”

Conclusion.

It is melancholy to reflect that all living things have a time to flourish, and then must die, and pass away forever. Some things, like the leaves, come and go periodically; in regard to others, Death has “all seasons for his own.” Though the full span of our years is so short that it seems but a dream to those who have reached its end, yet the great majority of people do not live out even half of its length:

Time! alas is ever on the wing,
While we speak, or think, or sing;
Whether working, or at careless play—
Time is speeding fast away.

Swiftly the moments fly away—
First the hour, and then the day,
Next the week, the month, the year—
Steal away, and quickly disappear.

Our days are like the blades of grass;
Or like the morning's fairest flow'rs;
If one chill wind, o'er them doth pass—
Alas, they wane and wither in an hour!

Man's natural wants are few, and by means of industry may always be supplied; while the splendid superfluities which surround the rich and great are often attended with more care and trouble than pleasure. A man cannot quench his thirst better out of a river than out of a full urn; nor is the drink better from a fountain when paved with marble than when it wells over the green turf. Very few wordly things appear great to a truly great mind, and such a one soon learns to find its happiness in intellectual possessions beyond the reach of fortune. For all things from without are but borrowed; and whatever fortune can give she can also take away. An Italian garden in the snow-beds of Lapland—like a cooling zephyr kissing the burning surface of the desert, is as a melting and diffusion of the heart of God into a sky of summer-sunset magnificence. The cord that links man to man, man to angels, and angels to God, still vibrates from limit to limit, whenever a heart from earth to heaven weeps a tear.

Thirty Years Ago.

ODE TO A DOCTOR OF “AULD LANG SYNE.”

The “ode” consists of unequal verses in stanzas or strophes.

—THOS. BUSBY, Eng. Musician.

IN "OLD TIME'S" CANOE, SAILING
TOGETHER.

[THEN AND NOW]

By Dr. W. L. Lowder, Tipton, Ind.

PROEM.

'Tis not the holder of the castle,
Nor the wearer of the crown,
Nor the owner of the cattle,
On which heaven smileth down.

MEDITATION.

There comes a time to many of us, often
at the early twilight of a pleasant evening,
when the mind goes out in fancy and reality,
and muses on the Past as it *was*, on the
Present as it *is*, and the Future as it *may be*.

Who hath not shared that calm, so still and
deep,

The voiceless thought, that could not weep
A holy concord, and a bright regret—
A silent sympathy with suns that set?

THEN.

In the sunlight—LIFE'S *golden* sunlight,
You and I, old friend, sailed togeth'r,
When the waters mirror'd blue and bright
A golden sky and purple heath and heath'r.
And our oars, beat back, the gold'n wave-
light

To the song we sang, *there and then*, togeth'r.

NOW.

In the moonlight—LIFE'S *silver* moonlight,
We are gliding swiftly o'er the silent lake,
Where the mountains cast their shad'wy
light

Across our still and silv'ry wake.

But now our oars dip softly, lightly,
And the fleecy moonbeams shimmer brightly

* * * * *

On thy head, old friend, and on mine:
As in the days of "Auld Lang Syne."

Then, many a time, with a careless hand,
Have I push'd the boat from the pebbly
strand

Then paddled it down, where the stream
runs quick,

Where the whirls are wild and the eddies
are thick

And laugh'd as I lean'd o'er the rocking
side,

And look'd below in the broken tide

To see that the faces and boats were two
That were mirror'd back from old time's
canoe.

But now, as I lean o'er its crumbling side,
And look below in the still and sullen tide
The face, that there, I see, is graver grown
The laugh, that there, I hear, has a sob'rer
tone

And the hands, that lent, to the light skiff
wings

Have familiar grown, with sad, and sterner
things.

Then, I lov'd to bask, in the hours that
sped:

(The "golden hours on angel wings," above
our head)

As I rock'd, where the whirls, their white
spray shed.

* * * * *

Ere the blossoms wav'd, or the green grass
grew

O'er the "mouldering stern" of the old
canoe.

Now the currentless waters are dead and
still,

But gentle zephyrs play with the boat at
will,

And in mem'ry floats its full length of chain
Lazily in and out, back and forth again
Like the weary march of the hands of time
That meet and part at the noon-tide chime.

L'ENVOY.

The young, the lovely, soon pass away,
Ne'er more on earth are seen again;
Earth's fairest flowers too soon decay,
Alas! the blighted trees alone remain.

How oft we see the lovel'est thing
That proudly lifts its head on high,
Smile faintly in the light, droop its wing,
Then slowly fade away and die.

Thus kindly is the lesson given;
It helps to raise our hearts to heaven:
To rest the righteous, and to soothe the sad,
Doth lesson happy men and shame the bad.

Then let's fondly dry the falling tear—
It came to call us there from here.
For he who in life's battle, firm doth stand,
Shall bear hope's blossoms, into the silent
land.

VALEDICTION.

Farewell, old friend, until we meet again.
Last of the "bright-robed," flow'ry train;
And may life's chill November bring
(Before we hear the angels softly sing)
Hope's Golden Flower, the "last of all"
Where blossoms never fade nor fall.

"Solution of Albuminate of Iron" (Liquor
Ferri Albuminatis, Flexner.) Contains 13%
Alcohol. Each teaspoonful of this prepara-
tion represents one grain of Dry Albumin-
ate of Iron in permanent solution. A most
valuable form of Iron Tonic. Prepared by
Robinson-Pettet Co., incorporated, Louis-
ville, Ky. (See page xiv this issue.)

Charlotte Medical Journal

Published Monthly.

EDWARD C. REGISTER, M. D., EDITOR
CHARLOTTE, N. C.

GERIATRICS AS A SPECIAL BRANCH OF MEDICINE.

A few years ago the writer visited a large asylum for the aged near Vienna. The attending physician there remarked that after spending years among the aged he was as helpless in dealing with children as the pediatricist would be in his institution. This led the writer to study the peculiarities of the senile organism, and this study gave him a clue to the cause of the generally unsuccessful treatment of senile cases. The conclusions arrived at were the following:

(1) Senility is as much a physiological entity as is childhood.

(2) There are greater anatomical and physiological differences between senility and maturity than between childhood and maturity, the differences in the latter case being mainly in degree, in the former case they are differences in character.

(3) Many conditions pathological in maturity are normal in senility, hence not subject to cure.

(4) Disease in senility is not a deviation from the norm of maturity but from the norm of senility.

(5) Drugs act differently upon the senile organism than they do in earlier life and therefore therapeutic measures must be adapted to the senile organism.

(6) Finally, senility and its diseases must be studied apart from the medical study of maturity, for while the medical study of maturity may serve for comparison it cannot serve for guidance in dealing with senile cases.

An elaboration of the facts upon which these conclusions are based would cover the whole field of internal medicine, but a few salient points can be given.

There are marked changes in the bony structure, the spinal curves are increased, the chest walls become a rigid box through ossification of the costal cartilages and ensiform cartilage and calcification of the ribs, the pelvis is flattened, the neck of the femur is depressed. The waste of the lower maxilla and osteoporosis of the vomars change the appearance of the face. Hollow organs like the stomach and bladder become dilated, solid organs like the kidneys and liver contract. The exceptions are the heart and prostate, which become hypertrophied, and the gall bladder, which becomes thickened and its cavity diminished.

The calibre of arteries, capillaries and bile ducts diminish, of veins, intestines and ureters, increase. There are profound changes in the lungs, spleen, brain and marrow. Metabolic activity is altered, waste increases faster than repair, the elimination of calcium is greatly diminished, and the elimination of CO_2 by the lungs drops from 1340 cubic inches an hour to about one half in extreme old age. Yet in spite of this and notwithstanding the waste of the spleen to less than half of its weight in maturity and the complete change in the character of the bone marrow, the cell count and hemoglobin percentage of the blood are as in maturity. The contracted kidney of senility resembles the kidney of interstitial nephritis without giving a single symptom of nephritis, except at times albuminuria. Arteriosclerosis and aortic insufficiency are found in almost every senile case. On the other hand the senile organism offers almost complete resistance to the exanthemata except small pox, and other fevers of an infectious nature are comparatively rare in advanced life. Diseases that originate in old age are mostly deviations from the normal process of involution, or symptomatic of the normal senile changes. If we do not study the senile changes we are unable to deal understandingly with the discomfures they produce or with diseases that they give rise to. Such facts as these force the final conclusion that senility must be studied apart from maturity and as a physiological entity. Geriatrics is not a fad, and while it offers neither the brilliant results nor the financial returns that other special branches of medicine offer, it ought to appeal to the conscientious, scientific and humanitarian instincts of the medical profession.

I. L. NASCHER.

NOTES WORTH NOTING.

A physician who during medical discussions had the habit of springing little bits of knowledge new to most of his hearers, upon request gave the following explanation of how the trick was done:

"Like all well meaning physicians," he said, "I try to keep up with my medical journals and to read as many articles of interest in my line, internal medicine, as time will allow. I have long since discovered that it is a poor article indeed which does not contain at least one or two items of special interest and the presence of which well repays the reader for his patience. I soon learned to pick out these little points from the general run of an article with increasing ease, and to pay more attention to them, in fact, than to the article as a whole. First, I depended on my memory to carry my findings, but many of them failed to

appear when most needed, so I began to jot them down on a card and file the card in my card index."

Here are some of the fruits of his labor gathered during the last two or three months (the names of the authors and journals being here omitted).

"Mumps is sometimes complicated by pancreatitis, rarely by inflammation of the thyroid, thymus and lachrymal glands.

"A blood smear from a case of auto-intoxication usually shows many of the polys having an unusually dark protoplasm from excess of large ambophilic granules. The proportion of these cells decrease as toxins lessen in the blood so that the degree of autointoxication may be estimated. Also a comparative decrease in the number of polys and increase in lymphos.

"Formalin is a specific disinfectant for wounds caused by the bite of a mad dog. A five per cent. solution applied for twelve hours to the wound is preferable to cauterization with nitric acid or phenol.

"In pneumonia if the pulse rate per minute goes above the blood pressure in mm. of mercury, recovery is unlikely. The knee jerk disappears in pneumococcic pneumonia three or four days from the onset of the illness and returns about the ninth day; its disappearance before the third day means danger, while if it remains normal until the seventh day, recovery may be considered practically certain. In tubercular and other pneumonias not due to the pneumococcus, the knee jerk usually persists or is increased.

"Lead neuritis of the forearm spares the supinator longus muscle while traumatic neuritis does not.

"The most satisfactory treatment of gonorrhea in girls is the application, after cleansing, of silver nitrate 25% to the cervix and 10% to the vagina, followed immediately by petrolatum, once a week, together with the application of iodoform in glycerine 25% once a week. Vaccines apparently of benefit only where arthritis is associated.

"Two glasses of beer at bed time is good treatment for precipitate emissions in over-sensitive men; if glans penis is very sensitive, bath in solution of tannin in alcohol; if necessary, circumcision.

"An increase of diastase in the blood is an important diagnostic point in injuries to the pancreas.

"Menthol occasionally appears to have a specific action in the treatment of exophthalmic goitre. Parathyroids, grain 1 10 to 1-2 of dried gland, together with calcium salts in the diet, is sometimes valuable in relieving the nervous symptoms of this disease.

"Artificial intestinal obstruction in dogs causes death by loss of fluid in the vomit. If hypodermoclysis of saline solution is kept up the dog will live ten or more days until starvation sets in. This shows that lack of fluid from the tissues and not absorption of intestinal toxins is the main cause of death.

"Automobile speeding is a cause of sexual impotence.

"Lymphocytosis in Graves' disease points to a simultaneous involvement of the thymus gland.

"Iodides and bromides are found to lower opsonic index of patient's blood to pus germs, thus explaining the frequency of acne after administering. Arsenic found to raise index and would be a good remedy to counteract these disagreeable effects when iodides or bromides are given for any length of time.

"A four per cent. solution of picric acid in alcohol (95%) painted over and around site of vaccination for small pox 48 hours after the operation causes less general and local reaction and does not interfere with the results.

"If the vacuum bottle is used in infant feeding, the following points must be observed: Heat milk to 150° F. (by thermometer) and pour in bottle previously warmed within by hot water; stopper tightly and keep in warm place; at feeding time take temperature (thermometer kept in bottle to avoid infection) and if below 115° F. discard, if above, allow to cool in nursing bottle. Never use milk if below 115° F., which is ordinarily reached in eight to ten hours; below this point the bottle becomes an incubator for germ life and the milk a culture medium.

"Blackening of the skin from wearing gold jewelry is due to the oleate of gold either produced by the natural oil of the skin or to cold cream and similar preparations applied. Even pure gold will darken the skin in certain persons. Sulphur deposited on the skin from within or from the atmosphere sometimes plays a part.

"The Bier treatment of tubercular joints is greatly aided by the simultaneous use of potassium iodide, 10 to 40 grains t. i. d.

"Plaster of Paris in time produces softening of the bone to which it is applied.

"Thickening of the foreskin over the clitoris, which is easily removed, is a very common cause of sexual indifference in women.

"Syphilis without the primary chancre is rare, but possible—called by the French, syphilis d'emblee.

"Section of the vagus nerve in 37 rabbits caused gastric ulcer in 27.

"Difference in physical signs of right

lung apex as compared to left is due to immediate contact of trachea with right apex and to the reduction of the right apex in size from encroachment of the large vessels. Little or no difference in chest measurements of two sides in right and left handed persons."

THE WOMAN MILITANT.

The above heading might be thought to savor more of an economic than a medical subject. Any matter, however, that has to do with the health and welfare of a people is rightfully within the scope of medical jurisprudence.

In the most remote annals of history we find woman a creature subservient to the will of man; this condition was dependent upon competitive physical effort and in this unequal contest the superiority of the man was paramount, as at this and succeeding periods we find her both as a bearer of children and as a toiler in the fields; as the light of civilization progresses we find her isolating in a realm more compatible with her created and creative capacities, and in proportion to her selective isolation has her power increased.

Today we find her in better advantages than ever before or than man ever enjoyed—not in given cases, but in generalities.

She is, as a rule, not the bread-winner but the conservator. The conservator and the director and the educator of the forces of nations yet to be—children. And with this grand but heavy responsibility devolving upon her alone, we find her fighting to acquire and maintain positions and conditions for which not only nature has not qualified her but for over a prolonged period of time she would be physically unable to maintain.

That woman whose grace, attainments, and influence, has been, and is, such a power should seek strange fields of effort which in the evolution of the process can only mean a reversion to the same equality(?) that in primeval times made her a toiler in the field, can only be explaining by a lust for added power which at best is dubious and is remindful of the fable of "The Fisherman and the Flounder."

It is not to be denied that woman is not, nor ever has been, the physical equal of man; not only this, but it is hardly remotely possible that she ever will be; the occasional exceptions to this simply proves the rule.

Anatomically the female is slighter than the male, the points of poise are at different angles, as regards the bony framework, the distribution of fat is largely in the body of the muscle instead of between the muscles, as in the male.

All this may make for symmetry and con-

tour, but it does not speak for strength or endurance; added to this that woman is woman with the special organs of generation and lactation with accompanying susceptibility to external injury during gestation, during which period she is naturally inclined to quiet and, in a measure, seclusion, it would not, for these reasons alone, appear that woman is qualified to enter the more strenuous and rougher field into which by necessity, (not choice) by reason of his strength, man has been forced.

This does not question the equality of humanity, for so long as the psychic power of the mind is recognized, we cannot ignore the intuitive intellectuality of woman.

Psychologically she is possessed of greater moral courage than man, she is more tenacious to beliefs and in her affections; she is more given to emotions and mental impressions; her nervous organization is more susceptible; mentally (and physically) she is of more delicate fibre.

Her mentality is not, however, of analytical, or essentially of productive (creative) type, but by reason of her qualities and sex, she could easily be regarded as 60 per cent. the procreator and conservator of life.

It is only when she repudiates the privileged responsibilities, that of domesticity and the great majesty of motherhood with which the Almighty has entrusted her, that she becomes a renegade and a parasite; and these responsibilities are not at our personal dispositions, not influenced by caprice or inclination—it is the law of nature and of God, absolute and immutable.

F. N. B.

A RELIC OF BARBARISM.

Progress in medical science has been phenomenal during the past decade. The medical profession and the people have many things to be proud of and thankful for. Yet we still have amongst us, in practically all parts of this great commonwealth, an antique, yes, a barbarism, that still clings to our skirts with the tenacious grip of an octopus, which we seem unable to destroy. It has reigned supreme since the eighteenth century and at the present day still holds forth as one of the mainstays in our treatment of mental cases, the grossly, uncalled for abuse, of the use, of mechanical restraint in our various institutions.

Why is this? Do we still believe, as they did in the eighteenth century, that the insane patient is possessed of the devil? That his maniacal outbursts are controlled and regulated by the different periods of the moon's age? That by chaining or binding them that we can prevent these maniacal attacks? Decidedly no. The cause rests

with ourselves. Our inheritance clings to us and we seem unable to loosen its hold, thereby marking time, and progressing but little along this line.

Wherein lies the discrepancy in this great problem? It may be summed up in a few short words: Habit and an uneducated public. Can these causes be obliterated? Most assuredly yes. To do this, however, we must first educate ourselves, shed this old time-worn garment, and then enlighten the public.

Why does habit play such an important role? Because physicians and attendants that have preceded us in the institution have always used mechanical restraint. It is a quick and easy method to gain absolute control over the disturbed patient and thereafter he requires but little personal attention. Why this lack of personal attention? We have too few physicians for the number of patients under care. Too few and underpaid attendants and nurses who are deficient in training for the care of our insane.

How shall we educate the public and to what end? Lecture to them, write and describe to them the conditions as they exist. How they may be remedied, by having more funds to carry on this work. This no doubt entails a small increase in taxation, but think of the results. More physicians, more and well trained attendants and nurses, better equipped and up to date hospitals.

What is to be gained by this, all will ask? We will be able to cope, with some hopes of success, this great scourge, insanity, which is increasing by leaps and bounds at an enormous rate. The world will be more than a thousand fold repaid for this small increase in expenditure by the return of many more of those we hold dear to their home fireside who in the past have been given up as lost forever and buried alive, when they entered the portals of our institutions.

Book Notices.

What to Do in Cases of Poisoning. By William Murrell, M.D., F.P.C.P., Senior Physician to the Westminster Hospital; Lecturer on Clinical Medicine and joint Lecturer on the Principles and Practice of Medicine; Late Examiner in the Universities of Edinburgh, Glasgow, and Aberdeen and to the Royal College of Physicians of London. Eleventh Edition. Paul B. Hoeber, 69 East 59th St., New York, N. Y., 1912.

This edition has been thoroughly revised and many new poisons have been added,

including the deadly veronal.

The first edition of this work was published in 1881, and there has been such a demand for it until the eleventh volume has been called for.

The price of this little volume is \$1.00. It is of a convenient size for a physician to carry in his pocket daily. It contains a description and treatment for almost every known poisoning.

Pellagra—History, Distribution, Diagnosis, Prognosis, Treatment, Etiology. By Stewart R. Roberts, S.M., M.D., Associate Professor of the Principles and Practice of Medicine, Atlanta College of Physicians and Surgeons, Atlanta, Georgia; Physician to the Wesley Memorial Hospital; Formerly Professor of Biology in Emory College. With eighty-nine special engravings and colored frontispiece. St. Louis: C. V. Mosby Company. 1912.

The contents of this volume are as follows: I. General Considerations; II, History and Geographical Distribution; III, Classification; IV, Alimentary Tract in Pellagra; V, Skin in Pellagra; VI, Nervous System in Pellagra; VII, Other Systems and Changes; VIII, Diagnosis and Prognosis; IX, Treatment of Pellagra; X, Cause of Pellagra.

We feel sure that this is one of the most valuable contributions that has been made to the science of medicine and surgery in a decade.

The illustrations in this volume are of a very high class, and add much to the interest and value of this work.

The book contains 272 pages of reading matter.

Landmarks and Surface Markings of the Human Body. By L. Bathe Rawling, M.B., B.C., (Cant.), F.R.C.S. (Eng.), Surgeon with Charge of Out-patients, Demonstrator of Practical and Operative Surgery, Late Senior Demonstrator of Anatomy at St. Bartholomew's Hospital; Late Assistant-Surgeon to the German Hospital, Dalston; Late Hunterian Professor, Royal College of Surgeons, England, etc. With thirty one illustrations. Fifth edition. Paul B. Hoeber, 69 East 59th street, New York. 1912.

From the fact that the fourth edition was disposed of within one year, it is obvious that but little alteration or addition is necessitated for this edition; the text has been adhered to, but the illustrations have been improved.

An outline of the contents of the volume follows: The Head and Neck; The Upper Extremity; The Thorax; The Abdomen; The Lower Extremity; The Length of Various Passages, Tubes, etc.; The Weight

of Some Organs; The Ossification and Epiphyse of the Bowels of the Upper and Lower Extremities.

This volume is well bound and shows no lack of the careful work on the part of the publishers.

The Practical Medicine Series Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School. Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume III. The Eye, Ear, Nose and Throat. Edited by Casey A. Wood, C. M., M.D., D.C.L.; Albert Andrews, M. D.; Gustavus P. Head, M.D. Series 1912. Chicago: The Year Book Publishers, 180 N. Dearborn St.

This, like the other volumes of this series, is a quite complete, concise study of the Eye, Ear, Nose and Throat. These volumes are of a convenient size and really discuss the more important phases of the subject with which they deal.

The price of this volume is \$1 50.

Kidney Diseases. By W. P. Herringham, M.D., F.R.C.P., Physician to St. Bartholomew's Hospital, etc. With chapters on Renal Diseases in Pregnancy. By Herbert Williamson, M.D., F.R.C.P., Assistant Physician-Accoucheur to St. Bartholomew's Hospital, etc. London: Henry Frowde, Oxford University Press. Hodder & Stoughton, Warwick Square, E. C. 1912.

The following outline will give some idea of the contents of this volume: Anatomy, Normal and Abnormal and Movable Kidney; Physiology and Pharmacology, Diabetes Insipidus, and Enuresis; Normal Constituents of Urine; Abnormal Constituents of Urine; Chronic Intermittent Albuminuria in the Young; Methods of Examination of the Renal Function; Haematuria, Family Haematuria, and Essential Haematuria; Haemoglobinuria and Paroxysmal Haemoglobinuria; Dropsy, Essential Dropsy, and Uraemia; Nephritis; Acute Nephritis; Sub-acute and Chronic Diffuse Nephritis; The Treatment of Diffuse Nephritis; Acute Interstitial Nephritis; Cardio-Vascular Changes; Polycystic Diseases of the Kidney; Renal Disease in Pregnancy Dependent Upon Toxaemia; Pregnancy and Chronic Nephritis; Haematuria in Pregnancy; Pyelitis and Pyelonephritis (1) In Pregnancy. (2) In Conditions other than Pregnancy; Renal Tumors; Hydro-Nephrosis, Haemato-Nephrosis, and Pyo-Nephrosis; Perinephritis and Perinephric Abscess; Syphilis, Tubercu-

culosis, and Lardaceous Degeneration; Renal Calculus.

This volume is one of unusual value and contains many new methods and new theories. The book contains 378 pages of carefully indexed reading matter. We take great pleasure in recommending this work to our readers.

Tuberculin Treatment. By Clive Riviere, M.D., London, F.R.C.P., Physician, East London Hospital for Children, Shadwell, Physician to Out-patients, City of London Hospital Diseases of the Chest, Victoria Park; and Egbert Morland, M.B. and B.Sc. London, M.D. Berne of Arosa, Switzerland, Visiting Physician to the English Sanatorium, (Villa Gentiana). London: Henry Frowde, Oxford University Press. Hodder & Stoughton, Warwick Square, E. C. 1912.

This work is divided into three parts as follows: Part I, The General Lines of Tuberculin Administration; Part II, The Method of Immunization with Tolerance (Koch). The Treatment of Auto-Toxic Tuberculosis; Part III, The Method of Immunization without Tolerance (Wright). The Treatment of Localized Tuberculosis.

This volume contains 277 pages of valuable reading matter, together with a great many useful charts, etc. The authors have given to the medical profession a most concise and helpful work, and this book is worthy a place in all medical libraries.

Gonococcal Infections. By Major O. E. Pollock, Royal Army Medical Corps, and Major L. W. Harrison, Royal Army Medical Corps. London: Henry Frowde, Oxford University Press. Hodder & Stoughton, Warwick Square, E. C. 1912.

The reader can see from the following outline of the contents of this volume that the subject is thoroughly discussed:

I. Pathology; II, Vaccine and Serum Therapy; III, Primary Infections; IV, Treatment of Gonorrhoea in the Male; V, Gonococcal Infections in the Adult Female; VI, Gonococcal Ophthalmia; VII, Gonococcal Vulvo-Vaginitis of Little Girls; VIII, Gonococcal Septicaemia.

In this volume the authors have endeavored to give a concise account of the present state of their knowledge of this important subject.

The book is beautifully bound and it is in every sense of practical value.

A Text-Book of Pathology. For Students of Medicine. By J. George Adami, M. A., M.D., LL.D., F.R.S., Professor of Pathology in McGill University, Montreal, and John McCrae, M.D., M.R.C. P., (London), Lecturer in Pathology

and Clinical Medicine in McGill University, formerly Professor of Pathology in the University of Vermont. In one octavo volume of 759 pages, with 304 engravings and 11 colored plates. Cloth, \$5.00, net. Lea & Febiger, Philadelphia and New York, 1912.

Drs. Adami and McCrae have now provided what is generally recognized as a most important desideratum in medical education—a text book of pathology, embodying a high degree of scholarship and literary ability, and written originally in the authors' own language, and especially for the student. This work is not in any sense a condensation or abridgement of "The Principles of Pathology," but to use the words of the authors it is "a selection and dwelling upon what we regard as most important for the student." They state further—"we have endeavored first and foremost to make clear and intelligent what is known concerning the deeper meaning of morbid states, and have not hesitated to sacrifice lists of data and their names. The all-important matter is to provide and familiarize the student with the working drawings of our science; once he has these in his head it is a comparatively simple matter for him to pigeon-hole mentally new facts into their proper places as they come pouring in upon him in the wards and dead house, in his reading and lectures." That it has been possible to present an adequate exposition of this important subject in one volume is a matter of congratulation not only for students and teachers, but also for physicians and surgeons, for whom the work will prove invaluable for purposes of quick reference. The elaborate series of illustrations includes over two hundred new and original engravings, made from the material at the disposal of the authors.

Republicans Naturally Progressive.

The reason why the Progressive party must of necessity be developed principally out of the Republican party becomes apparent after a little thought. In the first place, the evolution has already been accomplished in a number of States. In the second place, the Democratic party is a wholly different kind of entity from its chief opponent. The Republican party has always been comparatively homogeneous. The present split in the party is temporary and transitional. Fundamentally, the Republican party has always been Progressive, but in order to keep alive it is compelled from time to time to accept new views of what progress means and to adapt itself to new conditions. It is now in the process of a healthful transformation from within. Precisely as it threw off machine domina-

tion in Pennsylvania a few weeks ago, so it has been struggling to emancipate itself in many other States. Whether it keeps the name Republican, or not, the Progressive movement will be made up of men who, like Roosevelt, have been the leaders in the more radical wing of the Republican party.

The Democratic party has some elements of unity, but in the main it is a coalition of groups. Its largest factor is the solid South. Its second factor in permanence in Tammany Hall. Its third is the old-line Democracy represented by men like Governor Harmon, of Ohio, and its fourth is the radical Democracy represented by men like Bryan and Hearst. The Democratic party finds its opportunity not so much in its own shining virtues as in the faults and failures of the Republican party. The immense Democratic wave that struck the country in 1910 was due to the weakness and failure of the Taft administration and the action of a Republican Congress in passing the Payne-Aldrich tariff. The recent Progressive movement in the Republican party, as led by Roosevelt, was a confession of these mistakes.—From "The Progress of the World," in the American Review of Reviews for August.

Abstracts of the Leading articles of the month.

Cane Sugar in Cardiac Failure.—Dingle (British Medical Journal) reports remarkable improvement in a seemingly hopeless case of failing heart, through the use of cane sugar. The patient, who had damaged his mitral valve by over-exertion, had been treated with all the different cardiac drugs, in various doses, and under conditions of absolute rest and appropriate diet, but showed no improvement and had to have his abdomen tapped repeatedly, twenty-two pints of fluid being drawn off at one time and sixteen at another. Since June 12 he has taken 5 oz. of granulated cane sugar a day. Only twice since has he taken any cardiac drugs, and then only for a few days, and he has not again required tapping. He now sleeps well, is always able to lie down at night, has good appetite, no shortness of breath, no fluid in abdomen, heart and pulse considerably stronger and lungs almost normal. Whether he will sufficiently improve to allow of light work remains to be seen. His urine was examined at various times and only showed an excess of urates. He experienced no inconvenience in taking such a large quantity of sugar, except at first, when he sometimes had a feeling of nausea; and was able to discontinue taking aperients under the sugar.

Operative Correction of Contracted

Pelves.—Rotter (Zent. für Gyn.) proposes to achieve a permanent enlargement of the anteroposterior diameter of the pelvis by an operative reduction of the sacral promontory. This is proposed as a substitute for pubiotomy, which fails in securing such a permanent change in most cases. His procedure is as follows: With the patient in the Trendelenburg position, the abdominal cavity is opened by a low median incision and the sacral promontory exposed. The parietal peritoneum is incised longitudinally and the median sacral artery and the accompanying veins are tied off. The course of these vessels is readily exposed over the bodies of the last lumbar and first sacral vertebrae. A bone chisel about 3 cm. wide and slightly concave is then used to cut off a section of bone from $1\frac{1}{2}$ to 2 cm. thick from the anterior surface of the last lumbar and the upper portion of the first sacral vertebrae, including the portion of the intervertebral ligament between them. The soft parts are sutured over this wound and the abdominal cavity is closed. He claims that the true conjugate may be increased from $1\frac{1}{2}$ to 2 cm. by this operation and considers that it is applicable in all those cases in which the contraction involves the true conjugate and the latter is not less than 7 cm. The operation is proposed as a prophylactic measure and is to be employed in only those cases in which the pelvic measurements have been carefully made and the patient has been subjected to the test of previous labors under careful observation. He does not believe that the procedure is surrounded with any technical difficulties or that the removal of the sacral promontory interferes with the sustaining powers of the vertebral column, for the articular surface of the first sacral vertebra has a diameter of at least 5.5 cm. He says that this operation will avoid the induction of premature labor, perforation, pubiotomy and Cesarean section. The procedure, however, has not as yet been tried on the living human subject.

Treatment of Acute Puerperal Inversion of the Uterus.

—Phillips (Journ. of Obstet. and Gynec. of Brit. Emp.) says that the treatment of this complication advised by the ordinary obstetric text-books should be revised. They urge immediate replacing of the inverted uterus in all cases. In his opinion the displacement should be ignored until the shock which is so frequently present has been treated. The three symptoms present in such cases are hæmorrhage, pain, and shock. The latter is produced during the actual process of inversion, is always well marked immediately after the accident, but if the patient survive,

gradually disappears. The process of re-inversion also causes shock, even if the patient be anaesthetized. In an analysis of 184 cases Phillips finds a mortality of 23.4 per cent. In 79 of these, where the uterus was immediately replaced in the presence of marked shock, the mortality was 30 per cent. In 47 cases where the uterus was not reduced at once only two patients died—less than 5 per cent. The Dr. says that where there is marked shock this ought first of all to be treated by saline infusions, hypodermic injections of morphia and pituitary extract, and the application of hot blankets. After some hours the patient should be anaesthetized and replacement effected. After this a second saline infusion and stimulants may be necessary. The author describes three cases in which he followed out this line of treatment with successful results. In one of the cases he postponed replacement till the next day, and found no difficulty on account of the delay. The delay of a few hours does not appear to increase the difficulty materially. Whether shock be present or not an anaesthetic should be given.

Chronic Intestinal Stasis.

—Lane (Brit. Med. Journ.) advances the opinion that it is a predisposing factor in both in the production of tuberculosis, rheumatoid arthritis and cancer of the breast. The mechanism of the stasis is the production of a kink at or near the ileocecal junction, through adhesions formed in the peritoneum, a ligamentous action of the appendix, or through overloading of the small intestine which falls into the pelvis and is constricted as it passes over the brim to reach the cecum. In some cases there is much pain, distension, tenderness and vomiting, while in others there may be no complaint whatever. This does not make the stasis any the less deadly in its poison-producing effects. Ulcerative or mucous colitis may result, or infection of the pancreatic and biliary ducts with the development of gall stones, pancreatitis and even of cancer of the liver, pancreas, stomach, or duodenum.

The treatment may be operative or non-operative. The latter consists in the administration of liquid paraffine, to facilitate the passage of the intestinal contents, and in the wearing of a suitable abdominal support. Surgical interference consists either in dividing the constricting ligament or adhesions, or, if there is great intestinal atony, in dividing the ileum and inserting the proximal end into the colon below the last kink. In every case of tuberculous or rheumatoid arthritis, in which the usual treatment has failed, the bowel should be short-circuited without hesitation.

Lateral Hematocolpos in Double Uterus

and Vagina.—Vautrin (Bull. de la Soc. d'obst. et de gyn. de Paris) mentions the subject of the occasional occurrence of double uterus and vagina, one vagina having no exit. In such cases there may be an accumulation of menstrual fluid in the closed vagina, which becomes infected and forms a hematopyocolpos. The author relates the history of such a case operated on by him. In duplex uterus if the vagina is double and both have a patent exit there is no damming up of the menstrual fluid, but when the second vagina is rudimentary, or has no exit there is a periodic congestion in this closed tube, with a collection of fluid, and sooner or later this fluid is sure to become infected. When this occurs and the double condition is discovered it is necessary to do some operation to prevent the recurrence of the condition. If we simply open the vagina and drain it the opening generally closes and the condition repeats itself. If we amputate one uterus and leave the cervix we still have the congestion in the cervix remaining behind, and the secretion collects at the congestive periods. The best operation is removal of the entire second uterus and vagina whenever possible, leaving the single uterus in condition to functionate.

Specific Diagnosis of Gonorrhea in the

Female.—Van de Velde (Monatschr. f. Geb. u. Gyn.) says that modern conditions demand that the clinical diagnosis of gonorrhea in the female based on symptoms alone, is no longer permissible and even the ordinary bacteriological examinations frequently fail to afford a positive diagnosis. Greater attention should therefore be given to the specific methods in these cases and Van de Velde believes that a diagnostic culture should be regularly made. For the purposes of obtaining the true culture he considers the ascites agar medium the most suitable as regards the immunity reaction. Repeated finding of a low opsonic index is a symptom which undoubtedly points to gonorrhea, whereas a normal opsonic index does not mean anything. The Wright method he considers the most reliable but care should be taken in interpreting the results. The laboratory must support the clinical history and should not dictate the diagnosis or the treatment of the disease. A diagnostic vaccination sometimes brings about increased secretion in which the gonococci are much more numerous and easily found, even where they could not be previously determined. Inflammatory adnexal tumors show increased swelling and tenderness during the negative phase after vaccination, if they are gonorrheal in char-

acter. Recent adnexal inflammations are not susceptible to methods of diagnostic vaccination. Small initial doses must be employed and care taken not to overdose and endanger the patient. The results must be controlled by opsonic tests in order to determine whether a sufficient negative phase has resulted. Only when this is the case may the vaccine be regarded as of diagnostic significance and then even the negative results which are obtained by these methods are of value.

Boric Acid Poisoning.

—Sanders (Brit. Med. Jour.) records the case of a young man who was under treatment for dysentery. After ten days' treatment without improvement he was given rectal washes night and morning. The wash consisted of boric acid (saturated solution) and water, half a pint of each. These were continued for just over three weeks, at the end of which time the patient was rapidly improving, taking his food well. There appeared one morning a diffuse erythematous rash, with distinct papules. In the afternoon the patient was restless and inclined to be noisy, and by night he was delirious and could not sleep. The rash later became purpuric, and four days later there was slight puffiness of the eyelids but no albuminuria. The boric acid injections had been stopped as soon as the rash appeared, and convalescence was soon re-established and progressed favorably. Harley (Brit. Med. Jour.) mentions three cases in which boric acid solution (half saturated) was used to wash out the colon. In each case this was followed a few hours later by a marked erythema accompanied by urticaria and mental excitement, which rapidly passed off after the boric acid lavage was stopped. The author expresses some doubt as to whether these are really cases of boric acid poisoning. In the same issue J. H. Aytoun reports the case of a woman who swallowed almost an ounce of boric acid crystals, which had been mixed with half a tumbler of cold water. When seen about two hours afterwards she was in a very collapsed condition; the extremities and face were cold, and the cheeks and nose cyanotic. The pupils were widely dilated and equal; the conjunctiva of both eyes was markedly injected, the bright red vessels being plainly seen. A diffused erythematous rash was present on the skin of the trunk and limbs; it disappeared completely on pressure, was not elevated above the skin, and was not itchy. The pulse was 150, small, of very low tension and regular. The respirations were proportionately increased in frequency. The patient complained of great weakness and of abdominal discomfort. She had no

marked nausea and had not vomited. An emetic was at once given, repeated doses of magnesium sulphate were administered to produce active catharsis, and within a few days she was quite well. Allan (*British Journal Children's Diseases*) describes the case of a girl 13 years of age in whom there developed a morbilliform rash subsequent to the frequent use of boric lotion (8 grains to the ounce) as an eye wash after an operation on the eye. There were no other symptoms. The possibility of this rash being due to the boric acid was only entertained after other likely causes had been reviewed and dismissed.

Tuberculin in Ophthalmology.—Butler (*Birmingham Medical Review*) gives an account of seven cases treated with tuberculin. Many inflammatory diseases of the eye are caused by the tubercle bacillus; the author gives his figure as 1 per cent., and includes cases (a) that react to old tuberculin; (b) that have obvious tuberculous lesions; (c) that give marked family history of tuberculosis. His methods are as follows: For the tuberculin test the patient is kept in bed, and on a four-hourly chart. Other signs of tubercle are looked for. If the temperature is not above 99° F. an injection of 0.001 c.c. of old tuberculin is given. If there is no reaction, 0.002 c.c. is injected after four days. If still no reaction, 0.004 c.c. is given after four to seven days. If there is no reaction now, tuberculosis is not the cause of the disease. The new tuberculin T.R. is used. For the first month $\frac{1}{1000}$ mgm. is given weekly, and for the second month $\frac{1}{1000}$ mgm. weekly. If any rise of temperature is noticed the dose is at once diminished. The new tuberculin acts better if the patient has been tested with old tuberculin, and has reacted thereto. A reaction during the course of treatment has a prejudicial effect. These cases do better as out patients than when confined to hospital.

Soaps and the Skin.—Gardiner (*Edin. Med. Jour.*) describes a research on soaps, giving the following as his conclusions: All soaps, from their chemical constitution, must be irritant to the normal skin, the effect varying with the individual skin. Cotton-seed oil and other rancid fats are probably largely responsible for the irritant effects in cheaper soaps. The bactericidal power of soaps is nil, and even when combined with antiseptics they are of no value as germicides. There may be some reason for the introduction of such substances as sulphur and ichthyol into soaps because of their effects on the glands and blood vessels of the skin, but, clinically, antiseptics, and, above all, carbolic acid, increase irritation.

There is no scientific basis for the addition of extra fat to soaps; when soap is mixed with water the alkali freed will at once unite with the superfluous fat. Rosin and impurities have no significance from the present standpoint, but paraffin and benzene derivatives, when incorporated with soaps for cleansing purposes, increase the harmful effect on the skin. The minimum of soap should be employed, and well washed off.

Pneumococcal Peritonitis in Children.

—Barling, in *The London Practitioner*, says that a pneumococcal septicemia is rare in adults, their greater resistance enabling them to localize the invasion of the organism to the primary site of infection, usually the lungs. Pneumococcal peritonitis in the child may anticipate or be independent of any pulmonary lesion. The writer's compilation of 234 cases, including the twenty-eight upon which his paper is based, shows that 73 per cent. of the patients were females. There is not sufficient evidence, however, that the fallopian tubes are the probable route of infection. The theory that infection comes from the gastrointestinal tract has received much support. Post-mortem examinations in eighteen of the writer's twenty-eight cases showed a macroscopic lesion in only one case. Enlargement of the neighboring mesenteric lymph-nodes is rarely found in pneumococcal peritonitis. Local invasion of the bowel by the organism should manifest itself, at first at any rate, as a localized peritoneal inflammation; this, however, is not the case, the condition is from the first widespread and diffuse. The only theory that will explain the many features of the disease and account for the widespread and diverse lesions that are associated with it is to regard the infection as a septicemic manifestation. The primary focus is usually in the lungs, though in a certain proportion of cases the peritoneum only is attacked. Three clinical types may be recognized: Very acute cases presenting marked abdominal features from the first, but with no other pneumococcal lesion in the lungs or elsewhere in the body; cases which simultaneously, or almost so, with the onset of the peritonitis develop a pneumonia; and those in which the septicemia is of a more chronic type which may develop an infection of both pleura and then of the peritoneum. Of the symptoms of pneumococcal peritonitis, pain, vomiting and diarrhea are very constant in their occurrence. The abdomen rapidly becomes tender, immobile and rigid and then distended, with fever up to 103° to 104°. Leukocytosis is generally absent on the first day or two; in the most acute cases no increase in leukocytes occurs

throughout the illness. A rise usually begins about the third day and may go on to 40,000. In not a few cases differential diagnosis from appendicitis is impossible; but the early and diffuse rigidity and tenderness are suspicious signs, and if these are accompanied by initial diarrhea there is a strong suspicion that the case is one of pneumococcal peritonitis. In tuberculous peritonitis the constitutional symptoms are usually less severe and high temperature at first would suggest a pneumococcic condition. The mortality of the twenty-eight cases reported was 79 per cent. The type of case in which the best prognosis can be given is that in which the peritoneum only is attacked and there is no sign of involvement of lung or pleura; four out of seven of such cases recovered. All cases with pericardial involvement proved fatal. Treatment is early free incision and drainage, without wiping or irrigation. In the very chronic cases with residual abscesses in the pleura, peritoneum, or elsewhere in the body, the use of autogenous vaccines has been attended with considerable success, and should be used as a routine measure in such cases.

Tuberculosis of the Mesenteric Glands

in Children.—Corner, in *The London Lancet*, says that it has been proved that microorganisms are a hundredfold or a thousandfold more numerous in the cecum than in any other part of the alimentary tract. It may be assumed true for tuberculosis and other infective conditions of the alimentary tract. Hence they are at their maximum infectivity or septicity in the ileo-cecal region. To protect the body against this menace a large amount of lymphoid tissue has been formed in the ileo-cecal region. Hence the function of the appendix. There must be a continuous "ileo-cecal" strife between organisms and the lymphoid tissue. So long as the lymphoid tissue prevails the host is in good health. If the microorganisms get the best of the ileo-cecal strife the host is in bad health, and may suffer from appendicitis, colitis, or infected glands in the mesentery. There can be no mistake in assuming that the great entrance of tuberculosis from the intestine to the body is by the lymphatics of the ileo-cecal region, and that, therefore, tuberculosis of the mesenteric glands originates from there. The children suffer from ill-health and abdominal pains referred to the umbilical region. Those pains come on at night and sometimes after food. The loss of appetite is often accompanied by some disturbance of the action of the bowels, more often inactivity and constipation than looseness. The writer urges the very great frequency of

tuberculosis of the mesenteric glands in children, and advises the removal of the appendix in such cases as a preliminary step.

Treatment of Infected Abortions.—

Haberle (*Munch. med. Wochenschr.*) gives the results of his observations in a series of ninety-eight cases from Hofmeier's Clinic in Wurzburg. This series includes all cases in which fever was present before treatment was begun or in which decomposition of the secundines resulted. All the infected cases were included in the first half of pregnancy. Among the ninety-eight cases treated by radical means there were five deaths (5 per cent.), and in the remaining ninety-three cases, postoperative complications developed in three, including a pyosalpinx, a slight perimetritic exudate and a slight thrombophlebitis. In one-half of the total number of cases the temperature came down after the uterus was emptied and remained so. In thirty-one cases, the temperature dropped to the normal from one to three days. In eleven cases, a slight fever lasted from four to eight days and in three it persisted longer, although without any severe general symptoms. The clinical results in this series of cases seem to support the principle of active therapeutic interference in this condition. In one of the fatal cases, the curettage was preceded by numerous examinations before admission to the hospital, in the second, attempts had been made at cleaning out the uterus by a midwife, in the third, a protracted placenta previa abortion with severe anemia was present, in a fourth, there were evidences of a criminal abortion, and in the fifth cardiac weakness developed soon after the operation. He used a forceps or a dull curette in all the cases followed by irrigation with lysol solution and the application of a 20 per cent. carbolic solution in alcohol.

Rupture of the Vault of the Vagina

During Labor.—Rouvier (*Ann. de gyn. et d'obst.*) states that rupture of the vault of the vagina during instrumental labor is a rather rare complication since the use of ergot during the second stage of labor has been discontinued. At the present time it is due to ignorance or maladroitness of accoucheurs, and midwives. It occurs during the application of the forceps, version, and other forms of artificial delivery. Instruments may be badly introduced, in the wrong direction, or the walls of the canal may be grasped instead of the fetal head. The existence of cicatrices which have resulted from previous deliveries may be a predisposing cause of the accident. When retraction of Bandl's ring occurs the uterus is pushed upward by the fetal mass, and the

head lodges in the smaller portion of the inferior segment, unduly stretching it and causing it to rupture, and the vagina is torn at the same time. The movements of a woman partially under the influence of the anesthetic may cause instruments to deviate from the expected direction. Forceps are more often responsible for ruptures than other instruments. Embryotomes badly managed may perforate the uterus and tear the vagina. Any serious obstacle to the engagement of the fetal head may cause rupture of uterus and vagina by the uterine contractions. These contractions cause the upper portion of the uterine walls to thicken, while the inferior segment becomes thinned. Anything which prevents normal dilatation of the cervix, such as cicatricial contraction, may cause rupture of the cervix and vagina. Whenever the diameters of the fetus do not correspond with those of the pelvis, uterine contraction is irregular and rupture may occur. All sorts of irregular presentations are etiological factors. Anteversion of the gravid uterus, pelvic contractions, atresia of the vagina, congenital or acquired, and general or localized, are maternal causes. The tear may be a simple perforation, a long rent, or a disinsertion of the vagina. If the anterior cul-de-sac is involved the bladder will be torn. The symptoms are pain, hemorrhage, shock, migration of the fetus into the abdomen, or hernia of the intestines. Labor is interfered with only when the uterus also is ruptured. The rupture generally results, however, in the death of the fetus, due to the difficulties of extraction, which are increased by the tear. For the mother the prognosis becomes very grave. Death may come soon as a result of hemorrhage, or later as a consequence of sepsis. Prevention of such ruptures is the first object for the accoucheur, and this will be attained by better education of the midwife, and physician, frequent and proper examination, and early diagnosis of such complications as atresia and pelvic contractions. The public must be educated as to the possible dangers to the woman, and the necessity for trained care even in simple cases. If the tear is recognized before delivery labor should be expedited as rapidly as possible. Laparotomy or the Cesarean section is generally demanded. If the fetus is dead its destruction may be an assistance to delivery. After delivery a careful examination of the vaginal cul-de-sac should always be made if there has been a difficult extraction. In many cases the wound may be sutured, but if rupture is complete, laparotomy must be done, and the uterus removed *in toto*.

Path of Infection in Genital Tuberculosis.—Bauereisen (Arch. f. Gyn.) presents the results of an extended series of animal experiments in which a method was employed similar to that used by the same investigator in tracing an ascending tuberculosis of the urinary organs. Guinea pigs were used for the intravaginal inoculations, as the relations of the parts seemed more suitable for observation than in rabbits or other animals. Bauereisen used virulent cultures of the bovine tubercle bacillus and found that if the inoculated material was sufficiently virulent, a vaginal tuberculosis resulted in the presence of even microscopic lesions of the mucous membrane of the vagina. This experimental primary vaginal tuberculosis became disseminated through the lymphatics into the sections of the vaginal tract higher up, as well as in the tissue of the broad ligament. In addition to this, an intracanalicular ascending infection from the tubercle or the flow of the secretions was inhibited because of physiological or pathological conditions. The contractions of the genital tube favored the distribution of the tubercle bacilli within the canal. Where the genital tract is normal, the author failed to observe any spontaneous intracanalicular ascension of the tubercle bacilli. A primary tuberculosis of the uterus produced by experimental means becomes disseminated downward along the canal and also intramurally through the lymphatic channels to the deeper segments of the genital organs. In cases where the genital tuberculosis developed sufficiently, the virus gradually invades the walls of the neighboring organs through the lymphatic channels. A tuberculosis of the renal cortex may also be produced by a lymphatic invasion from the tubercular capsule of the kidney, as well as the aortic lymphatic glands.

Treatment of Tuberculous Glands of the Neck in Children.—Sutcliffe, in The London Practitioner, says that the general tendency is to spontaneous cure. The essential point in the treatment of these cases is rest, either in bed or a spinal chair out-of-doors. In children, practically the only cases that require operation are those in which suppuration has already taken place. Soft, large glands, especially when painless, and soft hard ones can safely be left alone; the former if due to enlarged tonsils will in most cases disappear with the removal of the causes of irritation, the latter are firmly encapsuled and do little or no harm. Where sinuses exist, as the result of the bursting of a superficial collection of pus, an operation is usually called for to remove the deep-seated gland that is the cause of the trouble. After the glands have

been removed, tuberculin is of some slight service. The writer usually waits at least a month after operation before giving it, and then uses it for about three months. The thickening, if present, clears up more rapidly, and infection in neighboring areas takes place less frequently, when tuberculin is used.

The Gauze-Ether Method.—M. von Brunn (Wiener med. Wochensch.) says that this method, which he regards as very simple, is still quite unknown in Germany. It consists in covering the face with a gauze compress of eight to twelve layers and sufficiently large to extend over the mouth, nose, chin, and cheeks. Upon this the ether is slowly dropped, and after about a minute another compress of the same size is placed over the first, and the ether then dropped on more rapidly. Anesthesia is thus induced within a short time without any suffocating feeling. The advantage of this method is that it may be adapted to the conditions present in the individual case by varying the thickness of the gauze layer and the amount of ether dropped on. In children and women fewer layers are required. It has been employed for about one and one-half years in the author's clinic, especially in adults, and in connection with the preliminary injection of pantopon and scopolamin has become the method of choice. The most important feature of this form of anesthesia is that the admixture of air with ether can be kept within certain limitations without any danger of overdosage. If the ether is thinly distributed over the entire compress there is no risk of too great cooling. Furthermore, the undermost layers of the gauze are not moist and cold, but actually become warm, and thus the ether is inhaled at the proper temperature.

Foreign Bodies in the Abdominal Cavity.—Hinterstoisser (Wiener klinische Wochenschrift) reports a case in which after laparotomy for ectopic pregnancy the patient continued to suffer from abdominal symptoms and felt a mass in the abdomen. At the second operation the mass was found to consist of firmly adherent coils of small intestine. During the separation of the adhesions the intestine was perforated and a large twisted gauze compress impregnated with fecal matter was found, the greater part of it filling up the intestinal lumen, while the rest was surrounded by cicatricial and fibrous tissue. An extensive resection of the affected coil of intestine was performed, the patient recovering. Examination of the specimen removed showed that the compress had become encapsulated between the omentum and intestinal coils, and later had made its

way into the neighboring intestine. Another case is reported in which after hysterectomy and salpingectomy for myomata the patient had a purulent vaginal secretion, with increase of temperature in the evening. Fifty-one days after operation a large offensive gauze compress was withdrawn with forceps from the wound in the vaginal vault, evidently having been left in the abdominal cavity during the laparotomy. In a study of the literature Hinterstoisser found a particularly large number of cases in which gauze compresses had been left in the abdominal cavity during operations for ectopic pregnancy. To avoid such accidents the surgeon should make haste slowly. For use in abdominal work tampons or compresses should be provided with a string or a clamp, while the number employed should be strictly supervised by the surgeon and his assistants. A large number of such compresses should always be on hand, so that there is never need of resorting to others. As to the fate of gauze compresses, in five cases collected from the literature they became encapsulated; in six entered the bladder; in ten were passed by way of the vagina and in eighteen by the rectum; in twenty-two perforated into the bowel; while in twenty-five they were discharged through an abscess of the abdominal wall.

The Operative Treatment of Gastric Crises in Locomotor Ataxia.—Foerster (Ther. d. Gegenwart) mentions twenty-eight cases where the posterior spinal nerve roots were resected in extreme cases of this condition. These are all the cases reported to date, and most of them are separately and concisely reviewed in this article. All of these cases were those of individuals whose condition was a most pitiable one, in spite of the fact that they had all received the benefit of careful and thorough treatment along approved lines. Of the twenty-eight cases three died as a result of the operation from meningitis or shock. In two cases, the operation resulted in no amelioration. In the remaining twenty-three cases, there was prompt cessation of the crises with marked improvement in the general condition and decided increase in weight. In a number of these cases the relief has been permanent, although in none of them was the period reported on over one and one-half years. In other cases, while there was at first entire relief of the crises, later these returned, although much less frequently and severely than before the operation. When one considers the miserable state of these patients, emaciated to a marked degree and often addicted to morphine, that is to say, poor surgical subjects, the death rate of three in twenty-eight is

surprisingly small. Occasionally bladder disturbances and paralysis of the legs followed the operation. This was by no means the rule and Foerster believes that such happenings should not be expected.

When one considers the desperate and pitiable condition of a patient with frequent or constant gastric crises, and sees that in the large majority of cases this operative procedure brings complete or marked relief to the sufferer, the conclusion seems inevitable that such patients should be given the chance which this operation procures for them. Further it is eminently desirable that these cases should be brought to the surgeon before they have lost so much ground as to render them bad surgical subjects.

A Modification of the Acetic Acid Test for Albumin in the Urine.—Glaesgen (Munch. med. Woch.) calls attention to a method of employing the acetic acid test for the detection of albumin which has been used for years in France. Method: 20 c.c. of urine, about three-fourths of a test tube 1.5 cm. in diameter, are treated with five drops of 20 per cent. acetic acid, mixed, and one-half poured into a second test tube. The contents of one tube are boiled, the other serving as a control. Albumin produces a cloud or precipitate in the boiled tube. Before testing, the urine must, of course, be perfectly clear; if necessary, shake it with Kieselguhr and filter. If the acetic acid causes a cloud in the cold (nucleo-albumin) it is cleared by filtration before boiling. With an alkaline urine, acidulate slightly to prevent the precipitation of the phosphates, or, if a precipitate of phosphates appears when the urine has been treated with acetic acid and boiled, a few more drops of the dilute (20 per cent.) acid may be added to dissolve it. This will not redissolve even a slight albuminous cloud, provided the urine is not boiled again. Glaesgen has compared the test performed in this way (1) with the usual method, i.e., boiling the urine and then adding dilute acetic acid; (2) with the acetic acid and potassium ferrocyanide test; and (3) with Heller's test. The writer used urines with known albumin content and diluted them with urine which was negative to Spiegler's reagent. The Dr. found that the test as described would detect albumin in a dilution of about 1 to 180,000, the heat and acetic acid test in 1 to 130,000, acetic acid and potassium ferrocyanide, 1 to 70,000 after standing some time, and Heller's 1 to 35,000. In no case where physical examination of the patient did not reveal an adequate cause for a trace of albumin was the test positive. He therefore thinks it does not react to the minute

quantity of albumin present in normal urine. When a patient is on a milk diet, the urine may be so poor in salts that a trace of albumin may be missed with the test. But the addition of sodium chloride obviates this difficulty.

On New Characteristics of the Urine in Health and Disease.—Pribram (Deut. Arch. f. klin. Med.)

has made interesting observations, injecting various portions of normal and pathological urines into rabbits and noting the effects. The Dr. finds (1) that the injection of urine gives rise to the formation of hemolysins, precipitins, and complement binding antibodies in the serum of the injected animal. The precipitin formation is always more marked with the injection of normal urines than with albuminous; the fixation of complement, on the other hand, is greater when one uses albuminous urines for injecting the experimental animals. (2) The injection of urinary sediment and of the alcohol-ether insoluble portion of the non dialyzable fraction ("lysogenous substance") of the urine produce the same changes in the serum of the injected animal as described under (1). (3) The "lysogenous substance" contains the normal urinary albumin and a number of other substances. In chronic nephritis this fraction is practically normal, whereas in acute nephritis its increase runs parallel to the amount of albumin. (4) Both qualitative and quantitative examination of the fraction show that its chief constituents are not albuminous. (5) The substances in the urine which act as antigen probably arise in the renal cells. (6) The urine is markedly toxic. The same is true of the lysogenous substance and of the sediment. Repeated injections seem to raise the resistance of the animal to the poisoning. (7) The symptoms of uremia are possibly due to a retention of the toxic bodies contained in the lysogenous substance. (8) The "Morner fraction" of the urine contains traces of lysogenous bodies, but no precipitin or complement binding antigens, and is not toxic to animals. In the examination of the urine of 50 patients with hypertension, the usual heat and acetic acid test showed a trace of albumin in 15, the acetic acid and heat in 36 cases.

Relationship and Duties of "The Proctologist" to the Profession.

He stated that this Society was an innovation when organized,—a strange vessel on the high seas. A child of American Medicine, it has now become a sprightly youth, with ambition and strength of purpose, having and exercising authority.

The medical world recognizes as authori-

tative, the expressions of its Fellows in the field covered.

He admonished discretion, thorough description and perfection of technic. Hasty speech or carelessly written papers cannot be erased or changed—as in their publication they become a permanent record.

He referred to the theories of our science, which were born of dreamers and nurtured by enthusiasts, and fancies no solid superstructure could be reared on foundations so infirm, and added that neither these, nor the honor, distinction, nor the gain they hold out, should be sufficient to determine the surgeon to make merchandise of theories.

He called attention to the obstacles this Society had encountered, because of these fragile theories, which had previous to its existence been set up as targets for those who were unfavorable to the development and progress of this specialty.

He considered the true surgeon and specialist as humanitarian, whose purpose in life is to save life, restore health and happiness, and admonished him to shield and protect his brother from the darts aimed to destroy.

He also referred to cancer in the rectum, sigmoid or colon, which may have been treated as of minor significance until metastases are so extensive as to preclude hope of a cure. He praised those Proctologists, who have with much patience and fortitude labored for and finally have overthrown that unfortunate assignment of malignant rectal and colonic cases to untimely graves.

He stated that much harm has been done by the profession in the establishment of drug habits among the American people for the relief of constipation, as last year's symposium before this Society would show, and says the Proctologist is best equipped to study these cases, and arrive at the true etiology pointing to means of relief.

The American people are living in tin cans and cracker boxes, sparing time only to catch the next train, or meet the next market report, are storming their nervous systems with destructive toxins, filling sanatoria and health resorts with wrecks and lowering the scale of human usefulness and intelligence. None can more early observe the impending catastrophe, or turn on the search light as the Procto-Enterologist, and scientist, who calls together the aids of chemistry, physiology, pathology and bacteriology and a fair degree of understanding as to the results of the methods and habits of life of the average American citizen, who is less careful in the selection of and preparation of his own food than that of his stock.

He complimented the Fellowship of the Society, which is limited to fifty and has

forty-three members, and stated no similar number of men are banded together in the civilized world who can boast of greater attainments for the science of medicine, or for humanity, almost every member being the author, or an associate author of a book, and these are all standard text or reference books in this branch, most of them also have been inventors of valuable instruments, or appliances applicable to this specialty.

He referred to some of the research work done by the Fellows, and to the possibilities yet before them in Procto-Enterology.

He alluded to the intra- and extra-rectal and anal and colonic infections, the role they play and the possible developments of vaccine therapy and antitoxins in combating them. He stated that each fellow should carefully weigh his selected subject for these meetings, being mindful of the fact that the general profession is looking to this Society and its individual Fellows for facts, not fancies; for proven remedies and technics, and not fads.

The Society has attained an individuality, both national and international, and he reminded his Fellows that there is labor yet to perform. That they must retain their progressive spirit and enthusiasm, lest they lapse into a state of self satisfaction when retrogression will mean their ending.

He referred to the fact that few of the hospitals of this country permit additions to their staff of specialists in Protologic work, hence the general surgeon and the general practitioner are doing the work in these institutions, about as these same men would do the Ophthalmologic work, etc.

He recommended the addition to the American Medical Association of a section, in which the subjects, Gastro-Enterology and Proctology, or Procto-Enterology may be discussed.

He advised closer confinement of the Proctologists to this work, to the exclusion of general work, and believed this will receive from the profession greater respect for this specialty, and that fewer of this class of cases will be referred to the general surgeon, or be accepted by him for treatment.

Conservative Life Insurance Companies are now convinced of the necessity of paying attention to the rectum and colon and such instances as the writer's confidential reports to alert examiners of cases of amebic infection, adenomata, papillomata, syphilitic and tuberculous diseases, which the examiner would have overlooked, had impressed him with this fact, and he wondered if these and similar instances had not brought to the minds of medical referees the possible advisability of subjecting all applicants for large policies to a plurality of examiners. He advised the change of

name of this Society to that of The American Procto-Enterologic Society, and stated not one of the Fellows of the Society had found he could eliminate from his work intra-abdominal intestinal work.—Abstract of President's Address, American Proctologic Society, Atlantic City, N. J., June 3-4, 1912. By John L. Jelks, M.D., Memphis, Tenn.

Multiple Adenomata of the Rectum. A Report of a Case with Symptomatic Relief by Simple Remedies.

This article was a report of a case of multiple adenomata of the rectum and sigmoid in a patient 42 years of age, who had been suffering for the past five years. He had frequent stools with mucus, some blood and a great deal of tenesmus. He was having from eight to ten stools daily. He suffered considerable pain throughout the abdomen. Examination showed numerous small tumors scattered through the rectum and sigmoid. Microscopic examination showed these growths to be adenomatas. The bowel was intensely inflamed and contained many ulcers. Under irrigation of the bowel with boric acid and the administration by mouth of castor oil and aromatic syrup of rhubarb, improvement was almost immediate. In three and a half months the patient had gained seven and a half pounds, and was comparatively comfortable. The tumors were reduced in size and the ulcers gradually disappeared. While the adenomatas are still present the patient is symptomatically cured.

Dr. Terrell emphasized the value of the administration of equal parts of rhubarb and castor oil, and thinks that in simple ulceration of the rectum, this treatment alone is almost a specific. He calls attention to many reports of cases in which adenomatas of the rectum are supposed to disappear, and points out that this condition must be merely a hyperplasia with inflammation, and, not true tumors, for the latter are permanent. As regards the predisposition of adenomata to become cancerous he called attention to the fact that these tumors are benign and are consequently composed of mature tissue, so they can not themselves become immature tissue,—which is malignancy. Instead of a malignant degeneration, it is likely that matrices of immature tissue have also been deposited where so many matrices of mature tissue are found, and the growth of the adenomata with the accompanying inflammation and ulceration, stimulates these immature matrices to develop into cancer: or, else, immature matrices are formed from the ulcers, just as they develop from ulcers, in cancer of the stomach. The simple treat-

ment which he proposed not only relieves the patient's symptoms, but by lessening the inflammation and curing the ulcers, it, also, decreases the chances for subsequent malignancy.—Abstract of Paper read before American Proctologic Society, Atlantic City, N. J., June 3-4, 1912, by E. H. Terrell, M. D., Richmond, Va.

Miscellaneous.

The Return from the Country.

Almost every city family, whose exchequer will permit, is accustomed to spend a goodly portion of the heated term away from home. This is both natural and salutary, provided good judgment is exercised in the selection of the country place or summer resort, as regards its general healthfulness and sanitary environment. Unfortunately sanitation on farms and in rural communities is not always what it should be and the result is that many health and pleasure seekers return in the autumn depressed and run down or perhaps infected with malarial or typhoidal poison. In other cases, especially at crowded fashionable resorts, because of the continual round of exciting amusements, some are tired and fagged out instead of rejuvenated as the result of their summer's outing. Many are certainly in need of that general constitutional reconstruction and building up of force and resistance which is necessary to withstand the business or social strain of the fall and winter. In such cases there is no one single remedy quite as dependable as Pepto-Mangan (Gude). It increases appetite, restores strength and general vitality, reinforces the hemoglobin content of the blood and acts as a prompt and efficient general tonic and reconstituent for patients of all ages.

Selection of a Tonic.

The greater care and thought being devoted to the use of remedies in disease is heartily to be commended and there can be no question but that the vastly superior therapeutic results that medical men are uniformly obtaining today are the direct outcome of the broader grasp of drug action. Take for instance, the successful application of tonic medication. No physician at the present day would think of administering any potent restorative or reconstructive remedy without paying due consideration to the following essential details:

First. The avoidance of any remedy which from its nature or ingredients would tend to unduly stimulate or excite the higher nerve centers.

Second. The avoidance—except when specifically indicated—of any remedies which suddenly and markedly raise the blood pressure.

Third. The avoidance of reconstructive measures except in rare instances, which do not have a well defined permanence of action, or which must be constantly increased in quantity, or continued indefinitely, in order to secure their beneficial effects.

Fourth. The avoidance of remedies containing drugs which are apt to produce dangerous or toxic effects as a result of some possible idiosyncrasy on the part of the patient.

Careful investigation on the part of the careful practitioner will enable him to see that of all the tonic remedies at his command, Gray's Glycerine Tonic Comp. is one of the few that can be freely employed with certainty that all of the foregoing requirements have been met.

As a matter of fact, clinical experience has clearly demonstrated that one of the strongest features of Gray's Glycerine Tonic Comp. is its practical freedom from any contraindication of age, sex, season or personal idiosyncrasy. It is a thoroughly reliable tonic that accomplishes its effects solely through stimulating the physiologic functions of the body. As a consequence its whole action is to restore a nearer normal balance between physical waste and repair; in other words, the proper nutrition of the whole body. Under its use every function is promoted and helped to do its normal amount of work, with all that this means in the maintenance of physical health and vigor.

Chorea.

The prompt effect of Gray's Glycerine Tonic Comp. in chorea and kindred nervous affections is attributable to its well known capacity of imparting new tone to weakened and depressed nervous systems. Its use in combination with arsenic in form of Fowler's Solution is attended by such uniformly gratifying results that it cannot fail to appeal to every earnest physician.

The following formula is most effective, employed, of course, in conjunction with as nearly complete rest as possible and careful regulation of the hygiene and diet:

R Liq Potass. Arsenitis, dr. ii
Glyc. Tonic Comp. (Gray's), qs. ad oz. viii

M. et Sig:—One to two teaspoonfuls—according to age of child—three times a day.

Under this treatment the nervous symptoms are promptly controlled and a child's condition rapidly restored to the normal.

Ringworm of the Scalp.

The author deprecates the routine use of the X-rays in the treatment of this affection on the ground that, even in the most careful and skillful hands, certain small percentage of cases become the victims of a permanent alopecia therefrom. He advises strongly that the ionic method of introducing antiseptics into the tissues be used instead, and describes this procedure in detail.

The appliances necessary are simple, consisting merely of a small switchboard and electrodes. If a public electric supply is not available, a battery of 20 or 30 cells is sufficient. The child's head is shaved, or the hair cropped short all over. A solution of the drug to be used—1 per cent. mercuric chloride or 1 per cent. aqueous iodine solution (with potassium iodide added to make the iodine soluble)—is rubbed well into the affected parts. Folds of lint (10 to 16 ply) are soaked in the solution, and applied evenly to the surface; over this the electrode is placed and secured by a few turns of bandage. The lint should overlap the diseased area and be thoroughly moistened. As electrode the author uses copper gauze. It should be large enough to cover the diseased area, and the contact between both the head and the lint, and the lint and the electrode, should be of equal pressure all over. One pole of the electric supply is attached to this electrode, and the other to a water-bath in which the child's arm or foot is immersed, or to a large, well-moistened pad bound to the arm or leg. The current is slowly turned on and gradually increased until the patient is beginning to feel slight warmth on the scalp. After a few minutes the current can be increased without causing discomfort, and it is the object to increase it as much as possible short of actual discomfort. When the area under treatment is large, a child usually allows 15 to 20 milliamperes to be used. Each sitting should be as prolonged as possible. The author aims at from forty to fifty minutes, being sure that one sitting of forty-five minutes with a given current is of greater value than three or four of only fifteen minutes with the same current.

The treatment should be repeated two or three times a week. It is well to have the head washed daily or every other day with an antiseptic, such as the sulphur, beta-naphthol, and green soap mixture commonly prescribed. If the treatment makes the scalp irritable or scaly, a mild antiseptic oil may be used between the sittings, but it must be thoroughly removed before making ionic applications.

The average number of sittings in the author's cases was 13. For three years he

has not known of a failure to cure; he has records of 53 cases in which hairs were examined and cultured after treatment, and found to be free of ringworm.—Riddell, in *The Glasgow Medical Journal*.

Poultices Should be Sterile.

Prof. George Howard Hoxie of the University of Kansas in his most excellent book on "Symptomatic and Regional Therapeutics," states under the heading of localized inflammation that "the danger of infection should ever be in mind in applying a poultice, for the maceration incident to the poultice favors infection, even if in ordinary circumstances one might consider the area germ proof."

Again he refers under the chapter on Pain, to the dangers from using dirty poultices and that skin affections have been added to the ordinary disorder when bread and milk or linseed poultices have been used to relieve pain.

It is thus noted how important then, it is, in the employment of a poultice for the relief of pain and inflammation, that a sterile and trustworthy product be applied. Inasmuch as poultices are a means of producing hyperemia by the use of heat and in so far as they do this better than by other means, it is interesting to observe that in the belief of Prof. Hoxie that "the clay poultices, known best in the form of Antiphlogistine, are the best to employ, as they are sterile and clean."

Antiphlogistine affords not only a safe but clean method of utilizing the advantages of hot moist heat in the treatment of pain or inflammatory conditions. It maintains heat in contact with the part for hours and its adaptability is only secondary to its therapeutic value.

Arsenical Pharmacotherapy.

Valenti states that the many organic compounds of arsenic have been frequently employed of late years. Differences have been noted, aside from the local action, between the action of these organic compounds and that of the mineral compounds of arsenic. The metallic arsenic compounds are easily dissociable, with a rapid liberation of the arsenic ions and greater toxicity. The organic compounds are less easily dissociated and hence less poisonous, although not giving the same certainty of absorption into the blood. Each organism has its own individual susceptibility to arsenic and must be separately tested as to idiosyncrasy. We are still ignorant of the intimate action of arsenic. Salvarsan readily liberates its arsenic, which is long found in the urine of patients treated by this drug. The quantity

of the solution used and the dose are most important; the differences in the animals experimented on are also of importance; the fact that one cannot get accurate knowledge of the combustion that goes on within the body, and of the lesions which exist in persons under treatment renders accurate observations of its use difficult. It is affirmed that mineral arsenic is a moderator of organic oxidation in relation to repair, and of exaggerated catabolism of nutritive material, while the organic compounds seem to have a more direct action on the hematopoietic organs, stimulating the erythrocytic and leucocytic activities, and increasing the function of the organ in reference to defense. For increasing the number of corpuscles and the hemoglobin of the blood the organic preparations of arsenic are most valuable. Other authors maintain that small doses of mineral arsenic lessen organic oxidation, while in larger doses the destruction of albuminous substances is stimulated, which destruction causes the symptoms of chronic poisoning. At the same time these doses act beneficially on the gastrointestinal circulation, favoring hyperemia and epithelial activity. In the more chronic diseases accompanied by cachexia arsenic is of most value.—*Il Polinico*.

Poisoning by Acids.

The author reports the case of a man who had swallowed sulphuric acid, in which the principle of treatment now recognized in diabetic coma, that of neutralizing the acids in the blood stream, was put to the test in this new field. Two hours after the ingestion of the acid, a suspension of magnesium oxide had been introduced into the stomach through a tube, and tracheotomy had been performed because of edema of the glottis. Six hours after the acid had been taken the patient was in a comatose state, which the author ascribes to the fact that the acid had withdrawn alkalis from the tissues to neutralize it, with consequent interruption of nervous functions. At this time 300 c.c. of a 5 per cent. solution of sodium carbonate was injected into the basilic vein. Immediately the patient recovered consciousness and asked to drink some water. Recovery eventually took place, though thrombosis occurred at the place of injection. It is advisable in using this measure to expose completely the vein into which the injection is to be given, in order to avoid contact of the alkaline solution with the surrounding tissues.—*Marchand, Munch. med. Woch.*

Erysipelas.

In mild cases the author recommends

that the involved area be painted every hour with a preparation consisting of 15 minims (1 c.c.) of phenol and 1 ounce (30 c.c.) of oil of turpentine. Severe cases, in which the disease extends over wide areas, are to be treated with dressings soaked in mercury bichloride, or, better, in absolute alcohol, applied twice daily, or oftener if required. Internally the author administers 1 tablespoonful (15 c.c.) of camphor water, three times a day, and by enema 15 grm. (1 Gm.) of collargol, twice daily. In a long experience no cases of erysipelas were lost under this plan of treatment.—Van Velzen, in *The Munchener medizinische Wochenschrift*.

Postinfluenzal Paralysis of the Soft Palate.

Wylie reports the case of a male, aged 30, who had always been a healthy man. In the second week of December he was laid up for ten days with an influenzal cold, congested throat, and fever. He returned to work before Christmas time, feeling weak, but otherwise well. A few days later fluids regurgitated through his nose; solids he could swallow quite easily. By January 7 his speech became nasal or cleft palate in character and he found that he had to hold his nose in order to make himself heard. No specific history. No diphtheritic symptoms and, although a culture had been taken, no Klebs-Loeffler bacilli had been diagnosed. On examination a bilateral paralysis of the soft palate was seen; sensibility was to a slight degree diminished. Except for a congestion and enlargement of the posterior end of the right inferior turbinal the nasopharynx appeared normal. The movements of the tongue, larynx and sternomastoid muscle were normal. Tonics of iron and strychnine improved the condition. The author considers it a case of postinfluenzal neuritis simulating the condition more commonly found as a sequela of diphtheria.—Proceedings of the Royal Society of Medicine.

Treatment and Prophylaxis of Scarlatina.

Roueché states that there is no specific treatment for scarlatina at the present day. Serum treatment for curative or prophylactic purposes has as yet been unsatisfactory. It is necessary to use all hygienic measures to insure the resisting powers of the patient and to apply symptomatic treatment as needed. The feeding should be a modified milk diet, absolute as long as the fever lasts, and then replaced by soft foods not containing proteids. The use of a salt-free diet, deprived of salt, consisting of potatoes, sugar, butter, and meat without

salt, causes lessening of weight, with diuresis and regular elimination of chlorides and urea. If salt is allowed the loss of weight occurs later in the disease. With milk alone the loss of weight is less, and the elimination more regular. As to the treatment of symptoms, too much throat and nose treatment has often been given; this should be confined to mild antiseptic washes gently applied. No antithermic remedies should be used. The best prophylactic measure is absolute isolation in a separate box, if the case is in a hospital, it being found that in general contagious wards diseases are spread to uninfected cases. Everything used by the patient should be disinfected before it leaves the room, and less stress should be laid on the disinfection of the room itself. The length of the isolation should vary with each case. There are cases in which the disease is not contagious after a few weeks, and others in which the contagion remains in the throat and ears for more than forty days. There are carriers of germs who should be pursued and isolated to prevent the spread of the disease.—*Journal de Medicine de Paris*.

Reactions of the Blood in Carcinoma.

Mackenzie notes that the serum of the blood taken from cases of carcinoma manifests two important properties: (a) an increased antitryptic value; (b) a power to accelerate the action of pancreatic lipase which is far in excess of what is found in normal serum. These two reactions when present together furnish a valuable aid in the diagnosis of malignant disease, and their absence excludes the diagnosis of cancer. After recovery or improvement, or during a period of quiescence, the accelerating power of the serum on lipase remains high, or may be even higher than when the disease is manifest. But under the same conditions the antitryptic value falls to normal. Such reactions serve, therefore, to control treatment and to indicate progress towards recovery or otherwise. The lipoclastic acceleration is a possible and natural factor in resistance to disease, in carcinoma and in other conditions. If this suggestion is admitted, serum and substances which increase this action or protective mechanism are indicated in treatment. Already, although the cases in mice and men are too few to yield decisive results, the author has observed a beneficial influence on malignant disease treated on these lines.—Proceedings of the Royal Society of Medicine.

Operation for the Relief of Elephantiasis of the Scrotum.

The various operations for elephantiasis

of the scrotum which have recently been devised show considerable ingenuity, but their very number suggests the want of one method which is entirely satisfactory. In a recent publication (Finska Laekaresällskapet Handlingar, November, 1911) Professor Ali Krugius has described a procedure which he found eminently successful after a number of other methods had failed, but he does not claim to have solved the difficulties which various forms of scrotal elephantiasis may present. The patient was a lad of 19, who had developed elephantiasis of the scrotum two years before, when he had been seized with rigor, headache, and general malaise, the cause of which was obscure. The swelling of the scrotum had increased, and had at last forced the patient to keep to his bed.

After several months in hospital there was little improvement effected, although drainage of the scrotum had been attempted by the transplantation of a portion of the saphena vein to the scrotum, within which its lower end was fastened, while its upper end communicated freely with the loose subcutaneous tissue over the pubes. Capillary thread drainage was also ineffective, and after the scrotum had been amputated the skin which had been drawn together over the testicles became so edematous that a new scrotal swelling was formed with embarrassing dimensions.

As a last resort an attempt to drain the swelling by means of the lymphatics of the spermatic cord was decided on, as these lymphatics are not as a rule involved in elephantiasis. An incision was made over the left inguinal canal, through which the cord was exposed and the testicle drawn up. The tunica vaginalis was divided in front and turned inside out so that its lining came in direct contact with the lymph in the scrotum which it was intended to drain. The eversion of the tunica vaginalis was maintained by its free border being carried up the spermatic cord, to which it was secured by ligatures. The scrotal swelling rapidly grew less, and had almost disappeared when the patient insisted on returning home.

The above operation had been performed for varicocele, but not on the same principles or with the same object. Should there be obstruction to the passage of lymph by the lymphatics of the cord, Prof. Krugius suggests utilizing the large omentum, the absorptive power of which is considerable. In order to carry the omentum into the scrotum, a plastic operation would be necessary, by which a strip of the omentum would be cut long enough to reach the scrotum without dragging on the upper attachment of the omentum. This is, however, rather a

drastic alternative, as it implies an extensive abdominal operation, and it is therefore only advocated in case of the failure of other and less dangerous methods.—British Medical Journal.

State Board Examination Questions of Florida.

ANATOMY.

1. Locate the fascia lata.
2. Name the bones of the wrist.
3. Name the bones of the larynx.
4. Describe the portal circulation.
5. Describe the chambers of the eye.
6. Name all the organs in the peritoneal cavity.
7. Define articulation; symphysis synchondrosis.
8. Name and locate the ductless glands of the body.
9. What is the prostate gland, Cowper's gland, Bartholin's gland, caruncula myrtiformes?
10. What structures would be divided in a cross section of the body at the seventh cervical vertebra? At the sacrococcygeal juncture?

PHYSIOLOGY.

1. What is the difference between anabolic metabolism and catabolic metabolism?
2. What are fats and how are they digested and carried into the circulation of the blood?
3. What are the chief constituents of normal fresh urine?
4. Describe the location at which the different sounds of the heart can be heard the plainest, and what produces each sound.
5. What is meant by normal blood pressure and how is it ascertained?
6. Why does the normal temperature of the body remain the same in hot weather as it does in cold weather?
7. What are the functions of the liver?
8. What are proteins, and which of the digestive ferments act upon them?
9. Describe respiration and what keeps it going?
10. What are leucocytes; their composition, and describe their functions and actions in the living body?

CHEMISTRY.

1. What use is made of the syllables *ous* and *ic*, *ite* and *ate* in distinguishing compounds from each other?
2. Express the chemical equation resulting from a mixture, in solution, of sodium carbonate and calcium chloride.
3. Describe the flame test for potassium, sodium, and cuprum (except cupric and cuprous compounds).
4. Give treatment, in detail, for acute

carbolic acid poisoning.

5. Describe symptoms of acute belladonna poisoning, and give treatment.

6. Describe symptoms of acute cocaine poisoning, and give treatment.

7. Describe chyluria and how recognized.

8. Describe the metallic copper test for arsenic.

9. What are the physical properties of phosphorus?

MATERIA MEDICA AND THERAPEUTICS.

1. Mention three classes of evils which may result from chemical incompatibilities in prescriptions. Write such a prescription.

2. How does cold reduce temperature, and how best applied?

3. Name four classes of medicines, with an example of each class, and give dose of example.

4. Name five antiseptics and tell in what proportion each should be diluted for surgical purposes.

5. Name the mineral tonics. Write a prescription containing the most useful.

6. An anesthetic being indicated, state the conditions that render ether preferable and those that render chloroform preferable.

7. Mention some of the indications and contraindications in your use of ergot.

8. What is the habitat and what are the physiological effects of digitalis?

9. Name three drugs used in the treatment of malarial fever. State how each controls this disease.

10. Give the theory of the alkaloid treatment of rheumatism.

OBSTETRICS.

1. Give diagnosis of pregnancy.

2. Describe the fetal circulation.

3. Describe pelvimetry and give the normal pelvic measurements.

4. How would you treat a case of placenta prævia?

5. Give etiology, pathology, and treatment of puerperal eclampsia.

6. Give etiology, prophylaxis, and treatment of ophthalmia neonatorum.

7. Describe the care of a new born babe.

8. Give treatment of post-partum hemorrhage.

9. Define involution and give causes for sub-involution.

10. Describe the menopause and give some conditions peculiar to that period.

GYNECOLOGY.

1. Describe the Sims' position.

2. What is meant by the term menstruation, and what are the two theories as to its relationship to ovulation?

3. Name the two general classes of amen-

orrhea, and give some of the causes under each class.

4. Give causes, symptoms, and treatment of metrorrhagia.

5. Give symptoms and treatment of vaginismus.

6. Name the most frequent of the uterine displacements. Give treatment of such displacement.

7. Give diagnostic points in small uterine fibroids.

8. What three lines of investigation must be considered in making diagnosis of uterine cancer?

9. Give causes, diagnosis, and treatment of cystitis.

10. Give symptoms and treatment of movable kidney.

SURGERY.

1. Give etiology, symptoms, and treatment of cholelithiasis.

2. Give etiology, diagnosis, symptoms, and treatment of abscess of liver.

3. Differential diagnosis of carcinoma from sarcoma of mammary gland.

4. Symptoms and treatment of laceration from the middle meningeal artery.

5. Give etiology and treatment of torticollis.

6. Give varieties of hip-joint dislocation.

7. Give classification and treatment of fistula-in-ano.

8. Give symptoms of flating kidney and describe in toto the radical operation.

9. What is known as fracture by "contre coup"?

10. Give symptoms and treatment of floating semilunar cartilage of the knee joint.

Fracture of the Internal Malleolus.—

Wegner (Munch. med. Wochensch.) reports a case of fracture of the type first described by Bircher and termed by him fracture of the malleolus lateralis tibiæ posterior. It would seem that these cases cannot be diagnosed without careful Roentgen examination. In Bircher's case a disc of bone was torn off from the posterior end of the tibia. The space between the tibia and the fragment was often very slight and only visible in the x-ray picture as a fracture line. His case had been diagnosed by another surgeon as a fracture of the leg at the lower third. When seen by him some time after the injury there was still present a swelling of the leg and foot, but no shortening nor displacement. The mobility of the ankle was impaired. The Roentgen picture revealed a small fragment torn from the malleolus as well as a spiral fracture of the fibula with distinct callous formation. The injury had resulted from a slip. While slight in character the after-effects are some-

times sufficient to render it worthy of consideration.

Case of Paralysis of the Left Third Cranial Nerve Associated with Left-Sided Headache.

Hall reports the case of a zinc worker, aged 30; family history good; previous health good; married over three years; one healthy child, aged $2\frac{1}{2}$; one miscarriage one year ago; no history of venereal disease. Present illness: On January 17, 1909, "a pain caught him right across the head." The pain lasted for six weeks and was more severe on the left side. After this gradual paralysis of the left third nerve set in: first diplopia, then complete ptosis; later the ptosis cleared up and the diplopia became troublesome again, and has not left him. He then began to have attacks of left-sided headache with nausea without any of the usual phenomena, and the third nerve paralysis became complete. Present state: The ptosis is now clearing up under mercury and iodine. There are no physical signs of disease other than the left third palsy. Wassermann tests in the blood and cerebrospinal fluid were both negative.—Proceedings of the Royal Society of Medicine.

The Subcutaneous Cellular Tissue in the Defense of the Organism of the Child.

Maillot states that the subcutaneous cellular tissue plays an important part in the general nutrition and defense of the organism of the child. This part may be disturbed by hypertrophy or atrophy of its anatomical elements, coupled with obesity, lymphatism, or cachexia. Lymphatism causes localizations of infections; atrophy and cachexia predispose to generalization of the infection and septicemia. Dystrophies of this cellular tissue explain the gravity of infections of cutaneous origin in the child. This shows the necessity of avoiding infections in children especially in the atrophic and cachectic.—Le Progres Medical.

"Solution of Albuminate of Iron" (Liquor Ferri Albuminatis, Flexner.) Contains 13% Alcohol. Each teaspoonful of this preparation represents one grain of Dry Albuminate of Iron in permanent solution. A most valuable form of Iron Tonic. Prepared by Robinson-Pettet Co., incorporated, Louisville, Ky. (See page xiv this issue.)

Drugs for the Expulsion of Hookworms.

—Observations were made under the supervision of the author to ascertain the efficiency of various drugs in removing hook-

worms. A careful examination of the stools and enumerations of all hookworms expelled in each case were made. The subjects under observation were Indian immigrants into Natal, and numbered 83. Eucalyptus, izal, pelletierine tannate, thymol, and beta-naphthol were the drugs employed, each individual receiving repeated treatments with one of these until no more hookworms were expelled. The men were given a light meal of sago for their last repast on the day preceding treatment, and on the same evening an aperient consisting of six drams of magnesium sulphate. Thymol and beta-naphthol were each given in three doses of 30 grains each at intervals of two hours, followed again in two hours by six drams of magnesium sulphate. These two drugs proved about equally effective, the proportion of hookworms expelled by the first treatment being, respectively, 97.87 and 97.52 per cent. The thymol treatment, however, using a total of 90 grains of the drug, was found to cause a serious constitutional disturbance. Stimulation of the nerve-centers was at first evident, the individual being excited and talkative, and the pulse and respiratory rates quickened. Subsequently dizziness and drowsiness were complained of, and if the patient was not kept recumbent some syncope might be exhibited. Under the 90 grain beta-naphthol treatment two of the men merely complained of slight nausea and a sensation of warmth in the epigastrium. There was no excitement or exhilaration, and faintness never developed to any alarming extent. The author considers that beta-naphthol is equally as effective as thymol, but is superior to it in causing comparatively little general disturbance, and in costing much less. A 60 grain beta-naphthol treatment also proved fairly effective, the first treatment expelling 86 per cent. of the parasites present. This drug was given in the following form: Beta-naphthol 4 drams (16.0); mucilage of tragacanth, 1 ounce (32.0); peppermint water, to make 6 ounces (192.0). The beta naphthol was first carefully triturated and the mucilage and water then added, the resulting mixture containing the drug in suspension.

Oil of eucalyptus, given in the dose of 2.5 Gm. (38 grains) along with chloroform and castor oil, expelled 74.2 per cent. of the parasites at the first treatment; izal, given in 4-dram doses with chloroform water, expelled 90 per cent., while pelletierine tannate, given in 12-grain doses, proved absolutely inert, not a single hookworm being expelled by two doses from ten men in whom beta-naphthol subsequently led to the expulsion of numerous parasites.

—Burton Nicol, *Journal of Tropical Medicine and Hygiene*.

Acute General Paralysis.

In a clinical lecture on "Paralysies generales rapides," Professor J. Lepine, of Lyons, discusses the question of the duration of general paralysis. The opinions of the various authors who have written on this subject greatly differ, some authors considering that a year or a year and a half is the most common duration of the disease, while others state that death occurs only after five years or more. About one-tenth of the cases seen by Professor Lepine had a very rapid evolution of less than a year. According to Professor Lepine's experience the cases which have such a rapid evolution may be divided into three main classes. First class: "Intellectuals"—i.e., patients whose brain has had severe and prolonged overwork; among these patients belonging to liberal professions are very frequently met with. Second class: Patients without overwork, but with irregular hygiene, like railway officials or omnibus drivers. Third class: Syphilitic patients whose mercurial treatment has not been carefully conducted or supervised. These patients have neglected Professor Fournier's advice—energetic treatment at the beginning, "safety treatment in the later stages, and rest during the intervals." To sum up, Professor Lepine thinks that if the average duration of general paralysis seems to be longer nowadays it is because we are able to make an early diagnosis; conversely there seems to be nowadays an increase in the number of the cases with a rapid evolution.—*Le Progres Medical*.

Labor After Anterior Hysterorrhaphy.

Schauta (*Monatsschrift für Geburtshilfe und Gynakologie*,) gives his views on the question of radical interference in cases of labor occurring after fixation and suspension operations on the uterus and from a consideration of all the factors concerned, believes that we should be less ready to interfere in a radical manner than has hitherto been the custom. The Dr. thoroughly studied the literature of the subject and claims that in a great many cases anterior traction on the cervix will result in bringing the os into the axis of the birth canal and favor delivery by natural means. In cases where this is not successful, a sagittal incision of the anterior lip of the cervix is sufficient. This procedure is particularly indicated in vaginal fixation, as the bladder is sufficiently high in these cases to be above the pelvic brim. In a ventral fixation the bladder occupies a much lower position and must therefore

the incision in the cervix is made. In a large proportion of these cases, the fetus lies in a transverse position, because the development of the uterus in its long axis is prevented, but there is nothing to stop its growth in a lateral direction. A version therefore is indicated followed by a breech extraction. Schauta believes that the elastic bag affords a favorable means of dilating the cervix in ventral suspension cases and aids in bringing the os into the line of the birth canal. Craniotomy is only indicated when the fetus is dead and the pelvis deformed. Referring to the large number of cases in which abdominal Cesarean section has been done, Schauta considers that in most instances this has been unnecessary and that a restriction should be made in the application of this operation.

Link the Past with the Present.

J. Marion Sims many years ago said, "For severe Dysmenorrhea I have found Hayden's Viburnum Compound of great service."

What was true as to the therapeutic value of Hayden's Viburnum Compound in the time of Sims is just as much of a fact today. As a remedy in the treatment of Dysmenorrhea, Amenorrhea and other functional irregularities of the uterus and its appendages, H. V. C. is dependable in action, and as it is of known composition and contains no narcotics it is safe to prescribe.

As a uterine tonic and antispasmodic it is of particular service, and to any physician who desires to clinically demonstrate its therapeutic action samples and literature will be forwarded upon request to New York Pharmaceutical Co., Bedford Springs, Bedford, Mass.

Treatment of Urethritis.

Asch remarks that he has found a paraffin mixture which liquefies at 104° F. beneficial in the treatment of urethritis. He injects 5 or 10 Cc. of the mixture into the urethra. He then closes the outlet with the fingers for about 5 minutes, by which time the paraffin has hardened sufficiently so as to run out. It tends to distend the urethra, exerting a soothing action on the tissues. It can be left for a period of twelve hours. The author injects previously a little local anesthetic to prevent muscular contraction. The patient is instructed to drink as little before and during the treatment as possible, and the bowels are emptied. A few drops of ichthyol may be added to the paraffin. The mixture at body temperature is of about the consistency of a salve.—*Zeitschr. für Urologie*.

First Lessons in Surf-Bathing.

For males: Never bathe alone. It is not only dangerous, but unprofitable. An audience is almost essential to successful surf-bathing. A feminine companion will be found most satisfactory. If you are possessed of an Apollo like figure, that fact will be most impressive when you are in a bathing-suit. If your contour is not fit for public presentation, the friendly waves will hide your shortcomings.

There are two ways of entering the water. One is to lead your fair companion daintily, a step at a time, into the fearsomely inviting depths, helping her over every inch of foam which might be called a "breaker." (For this purpose, it is important that you should hold both her hands in yours.) Answer her shivers and gurgles of delight with superior smiles, toss the water aside contemptuously with knees and shoulders; in short, adopt the attitude of "man, the protector of femininity." The other method of entrance is more violent, and in some ways more effective. Leave your companion on the beach with the explanation that you "must get wet first." Then run at top speed into the water, leaping over the billows like a frightened deer, and finally plunging forward on your stomach, with every appearance of complete fearlessness. She will admire your agility, your strength, and your courage. Return, smiling and nonchalant, with some such conventional expression as, "Isn't it glorious?" After this the actions of the first method may be repeated. If the lady is of the athletic type, however, she may prefer to be dragged swiftly through the water, even to be ducked and roughly handled, to show what a jolly good fellow she is.

After getting into the surf the greatest difficulties are encountered. Do not laugh immoderately at any of the lady's jokes. A mouthful of salt water will be your reward. Stand facing your partner, grasping her elbows, while she grasps yours. A slow and solemn dance may then be begun, to which the ocean will be found to supply a fairly good rhythm. As you bounce up and down, you may utter such polite ejaculations as "Heavenly! Divine! Oh, rapture! Oh, bliss?" Your companion will perceive the ambiguity of your remarks and blush prettily.

If a particularly large breaker comes rolling in, lift your companion high in the air, at the same time allowing the water to pass completely over your head. This is always considered an act of particular heroism. The slight discomfort attending it is more than balanced by the admiration and sympathy you will enjoy. If the lady accidentally lands upon your foot and notices

the look of pain in your countenance, pass it off with a jest about "the undertoe." You will find that very little more is needed in the way of conversation.—Sigmund Spaeth in August Lippincott's.

The Discretion of the Surgeon.

It will be long before the medical profession in this country forgets the lesson of the *cause celbere* in which a prominent London gynaecologist was sued a few years ago by a patient on whom he had performed oophorectomy. That lesson has imbued British surgeons with a keen appreciation of the necessity of obtaining consent before witnesses for any contemplated procedure. A not quite parallel, but instructive, case has lately been the basis of a law suit in New York. A woman was advised to consult a certain surgeon for appendicitis. The surgeon, after examining her, explained that a definite diagnosis was difficult, and proposed to operate through an incision which would give him an opportunity of inspecting the pelvic organs as well as the appendix. The patient gave the surgeon a free hand to do as he thought best. An inflamed and adherent appendix was found and removed, and the appendages of the right side were freed from adhesions, but were left intact. It was then discovered that the left ovary was the seat of a suppurative process, so it was removed through a separate incision. The patient convalesced speedily and safely, but brought an action for "trespass and assault" on the strength of the separate incision. *Male praxis* was not alleged. The damages claimed were ten thousand dollars, but fortunately the surgeon was vindicated and the suit failed.—The Hospital, London.

The Causation of Consumption.

The wording of the various Compensation Acts has led to many decisions which to the medical profession have seemed most extraordinary; both ordinary common sense and the accepted doctrines of medicine and surgery have many times been ignored in verdicts which have proved to be sound in law. In one recent case, however, the line of argument proved to be too far fetched, and the claim failed. A widow applied for compensation in the Salford County Court for the death of her husband from consumption. The claim was based upon the fact that some time previously he suffered an injury to the left eye while at work, which resulted in loss of the sight in that eye. This was supposed to have preyed upon his mind to such an extent that consumption followed. A medical witness for the applicant with some hardihood supported this

view, which was opposed by two other witnesses, one of them a well-known consultant. The Judge said that he thought it possible that the fatal disease was either caused or accelerated by the accident, but that the connection could not be held to be proved to the "reasonable satisfaction" of the Court. In order to succeed, such a claim must seem so probable that no other hypothesis could be accepted.—The Hospital, London.

Treatment of Gonorrheal Vulvovaginitis in Young Girls.

Dr. Tieche of Zurich (Correspondence Blatt fur Schweizer Aerzte, No. 5) reports the following interesting case: A girl, two years of age, was infected through the mother with exudation for over two months. Treatment commenced December 5th, 1910. Daily injection per urethra and vagina of 10 c.c. of $\frac{1}{2}$ per cent. solution of syrgol. Washed daily with boracic lotion. December 12th, 1910, no material change; 1 per cent. solution recommended. December 25th slight watery discharge, no gonococci. Mother is continuing treatment. January 12th, 1911, a few leucocytes in mucous but no discharge. No secretion, no gonococci in slime, February 20th, 1911:

I have frequently seen a complete cure in from five to eight weeks, by means of $\frac{1}{2}$ to 1 per cent. nitrate of silver, but relapses could not be avoided, although they did not occur in the majority of cases. It has not been demonstrated that relapses will not take place after Arthigon injections.

A case of vulvovaginitis which came under the writer's notice in 1909 was complicated with rectal gonorrhea in a girl of seven years. This was a very intractable case with frequent, painful, slimy motions, charged with leucocytes and gonococci. Such complications are rare, and it is the first case he had met. Kaunheimer describes a rectal case with these symptoms which were the prominent features in the above case. It cannot be denied that recurrence may take place from chronic rectal gonorrhea. It is therefore advisable to examine the stools carefully for the slime indications. The action of vaccine on rectal gonorrhea is at present unknown, therefore local treatment with ichthyol suppositories of syrgol cones is the safest course to follow. Good results were obtained in female gonorrhea by urethral injections of 1 to 2 per cent. solution of syrgol and douching with 1 to 3 per cent., also tampons soaked with $\frac{1}{2}$ per cent. solution. The author therefore strongly recommends this preparation of silver in the treatment of vulvovaginitis

The American Electro-Therapeutic Association will hold its next annual convention at The Jefferson Hotel, Richmond, Va., September 3, 4 and 5, 1912.

This is the largest and most distinguished body in the world whose object is principally devoted to physical therapeutics in electricity in all its forms, hydro-therapy, photo therapy, mechano-therapy, exercise therapy, dieto-therapy, and other natural agencies for the cure or prevention of disease.

The membership comprises the leading experts in this country who are engaged in this line of work, including fraternal delegates from Canada, England, France and other foreign countries.

Dr. J. C. Walton, of Richmond, Va., is chairman of the committee of arrangements.

The Injection of Magnesium Sulphate for Acute Articular Rheumatism.

Jackson reports five cases of acute articular rheumatism successfully treated with intramuscular injection of magnesium sulphate. The technique is simple. About 0.6 of magnesium sulphate is dissolved in 4 cc. of water, the solution is sterilized and then is ready for injection. The author employs an all-glass Luer syringe of 5 cc. capacity, observing aseptic precautions and selecting any convenient muscle as the point of injection. This injection may be repeated every other day. Active purgation sometimes is produced.—New Zealand Medical Journal.

Pyelitis in Children.—Still (North of England Clinical Journal) believes that pyelitis is usually an ascending infection. The predominance of girls in the Dr.'s series of cases, 23 out of 26 cases under one year, is consistent with this view. Rigors in infants are extremely rare, except in pyelitis. There may be no actual shivering, but the infant suddenly becomes cold, blue and collapsed. Straining or discomfort in, or frequency of, micturition was rarely present. The heat test is the only reliable test for albumin in the urine. He objects to an examination of a centrifugalized specimen or of the sediment on standing as only by an examination of a shaken up specimen can an idea of the relative amount of pus be obtained. Alkalinization of the urine with potassium citrate is the treatment recommended. The only gauge of efficiency of the dosage is the reaction of the urine. Eight to ten grains every two hours for an infant and 20 or more grains every two hours for a child three years old is often required. If potassium citrate disturbs the digestion the alkalinization of the

urine may be maintained by potassium or sodium bicarbonate. Potassium citrate should be continued at the efficient dosage for ten days after the temperature becomes normal, or until pus cells disappear from the urine. If alkalies fail urotropin or salol should be tried. When all drugs fail vaccine treatment with an autogenous vaccine is recommended.

Tuberculous Infection in Infancy and

Childhood.—McNeil (Edinburgh Medical Journal) performed the cutaneous tuberculin test in 541 children ranging in age from a few weeks to fifteen years. Undiluted old tuberculin of Koch was used and was applied to the skin as follows: A small circular area of epidermis was chafed off with the point of a needle, care being taken to avoid bleeding. On this denuded area of cornium the head of a darning-needle charged with tuberculin was pressed in with a rotary motion, forming a small bruised pit from which the fluid was rapidly absorbed. This trifling modification of v. Pirquet's method was found to increase the sensitiveness of the reaction. The cases were divided into two groups. The first group numbered 371 cases from the Royal Edinburgh Hospital for Sick Children and forms a representative group of the in-patients of the hospital. The second group numbered 170 cases from a boys' industrial school. These boys were drawn from the very poorest class of town populations, but they were apparently free from active disease. Of the 371 cases, 37.7 per cent. gave a positive reaction; of the 170 cases, 59.4 per cent. gave a positive reaction; of the total 541 cases, 44.5 per cent. gave a positive reaction. The hospital cases arranged according to age show that tuberculous infection reaches a maximum during the fourth and fifth years of childhood. These statistics, showing that nearly half the children that seek admission to the hospital are infected with tuberculosis before school age, suggest that the amount of tuberculosis, latent or active, at later periods may not be due to any appreciable extent to fresh infection during the period of school. Tuberculous infection is already apparent as a chronic process during the first year of life. Of the nine positive results obtained in his group, seven were in children not clinically tuberculous. Abdominal tuberculosis, in large part at least a bovine infection, is nine to ten times as common in Edinburgh and Glasgow as it is in New York and Boston. In 330 cases a cutaneous test was made with both bovine and human tuberculin but did not prove to offer a means of discriminating between the two types. In 258 both were equally positive or negative;

in only nine cases where both were positive was the reaction to the bovine tuberculin stronger. In no case was the reaction to human tuberculin negative and to bovine tuberculin positive.

Treatment of Chronic Metritis.—Mocquot and Mock (Revue de Chirurgie) advocate a procedure originally tried out by Delbet, consisting of the intrauterine injection of a thirty or forty per cent. solution of zinc chloride. After cleansing and drying the vagina, and ascertaining the permeability and position of the uterus with a sound, a fine cannula having minute lateral openings near its extremity is introduced to the uterine fundus and a quantity not exceeding two or three c.c. of a five per cent. solution of cocaine or novocain injected while the cannula is gradually withdrawn. Five minutes later, after a tampon has been placed beneath the cervix to protect the vagina, the cannula is reintroduced and an injection of zinc chloride solution, not exceeding one to two c.c. given. The cannula is rotated as it is withdrawn in order to spread the solution evenly over the mucous membrane. The vagina is then irrigated, but not tamponed.

After the first injection the patient should remain in bed a day; later, recumbency for four or five hours is sufficient. The procedure is not repeated until the eschar formed has been completely discharged, i.e., as a rule, in a week. The average number of injections required is three or four. Slight pains follow the injection in one out of four or five cases, and more severe pain, for which hot compresses may be applied to the abdomen or enemas containing tincture of opium given, once in about twenty-five cases—generally in women having annexal lesions.

Comparison of the results obtained by this method in 120 cases with Busse's statistics of cases treated by curettage show a marked advantage both in the percentage and permanency of results for the zinc chloride procedure. The greatest efficacy of the latter is seen in hemorrhagic metritis and in metritis following abortion; in the latter form, cure is almost certain, sometimes after but a single injection. In senile metritis and that accompanying fibromas the results are also good, though less prompt. In glandular and parenchymatous metritis, the pain is wholly relieved and the uterus reduced quite or nearly to its normal size. Subsequent conception and labor are not interfered with.

Kuert's "Organ-Sensations."—Kuert (Wien. Med. Woch.) reports some interesting investigations which he has carried on and in which he succeeded in eliciting a

decided sensation on the part of the patient when he percussed the regions of the stomach or of the heart. The doctor declares that there exists in many patients an unmistakable latent "organ-sensation" and that this may be made use of by the physician in determining the borders of these organs.

He proceeded as follows: Percussing as usual over the stomach he casually remarked to this patient: "This is the stomach," then in an entirely different region, say of the lower right abdomen, a difference in sound and sensation became readily apparent to intelligent persons, and when this contrast was ascertained, Kuert percussed the left side of the abdomen from below upward instructing the patient to say "now" when he received a sensation of stomach percussion. In this manner it was possible in many cases to ascertain the lower and right borders of the stomach, sometimes the upper and left, and the results usually agreed with the results of objective percussion obtained previously and recorded by means of a skin pencil.

He says that such an organ sensation of the stomach may usually be demonstrated in organic and functional disturbances, not rarely under normal conditions, especially when the stomach is half full. He did not as a rule succeed in obtaining positive results in advanced carcinoma, in older cachectic persons and in persons of low intelligence. The organ-sensation is described variously by different persons, some claiming a peculiar sensation as though the stomach were empty, a sort of feeling of hunger, others a feeling of slight painful pressure but the majority of the patients were not able to describe the sensation exactly.

In a similar manner, although less satisfactory, he was able to ascertain a heart sensation in which the borders of the absolute heart dullness were found to agree with those ascertained by objective percussion.

Salvarsan in Congenital Lues.—Welde (Jahrb. für Kinderhk.) has treated twenty-eight cases, most of whom remained under treatment for one half to three-quarters of a year. At first, 1 to 3 c.c. of an Alt's solution or oil suspension were given subcutaneously in the interscapular region. In all but one of the cases infiltration and necrosis resulted. Intramuscular injections given at a later period were also followed by infiltrations and necrosis, but were less marked than with the subcutaneous method of injection. In the last ten cases an attempt was made to introduce the drug intravenously. The use of the arm veins was soon abandoned, as introduction into the

veins of the scalp was found to be attended with less difficulty. Extravasation about the veins was not rare, but only once did phlegmon of the head result. At first, 0.008 to 0.01 per kilo of body weight were given. More recently, each child received 0.1 of the drug. In ten cases the injection was repeated once or twice. The largest total dose was 0.25. Within six to eight hours of the injection the temperature rose to 38° or 39.8° C. It became normal again in twelve to twenty-four hours. The general condition was not affected, and collapse was not seen. In a few cases, moderate diarrhea was present for one to two days. Vomiting occurred in two cases. The Herxheimer reaction (temporary hyperemia of the skin eruption) was seen in a few cases. The result of the injection became evident within a few days, when the eruption began to fade. The fading was usually so rapid that within eight to ten days only pigmented spots could be seen. Ulcerative processes in the mouth and nose, rhagades and moist papules dried up rapidly. The snuffle improved markedly, but never wholly disappeared. The characteristic pale yellow complexion was soon replaced by a healthy color. The effect on the visceral symptoms was much less striking. A case of cerebral lues was not benefited in the least, and of two cases of Parrot's pseudo-paralysis only one showed improvement.

The Wassermann reaction, with the exception of one case, always remained positive. In two cases a recurrence of the skin eruption was seen. In no case did permanent injury result from this treatment.

While his results were very good the author thinks they were not superior to those obtained with mercury and iodids. The shortness of the time does not permit us to say whether the cures were permanent. With greater knowledge of the conditions determining the absorption of the drug and its proper dosage, we may hope to accomplish permanent results.

Study of the Fat in Breast Milk.

Plauchu and Rendu (La Ped. Prat.) from an analysis of 3,450 specimens of breast milk from 46 women, reach the following conclusions: (1) Specimens of breast milk taken daily under exactly the same conditions show a decided variation from day to day in the percentage of fat. This variation is not due to variations in the amount of milk. The average daily variation was 6.21 gms. of fat per kilo. The woman showed a variation of 28.86 gms. per kilo. on successive days. (2) The average fat content of breast milk taken at the beginning of nursing is 34.05 gms. per kilo. (Minimum, 14.63 gms.; maximum, 52.5

gms.) (3) The number of pregnancies and the age of the mother has but little influence on the amount of fat. (4) The amount of fat diminishes in the first fifteen or twenty days; this is synchronous with an increase in the amount of milk. (5) The larger the amount of milk the lower the percentage of fat. (6) Morning milk is richer in fat than evening milk. (7) Milk at the end of nursing is richer in fat than at the beginning. (8) When the breasts are of unequal size the milk of the smaller contains a larger percentage of fat. (9) The addition of a large amount of fat or carbohydrate to the diet has no effect on the amount of fat in the milk. (10) Drugs (galactogogues) do not increase the quantity or quality of the milk. (11) Menstruation has no effect on the fat content of the milk.

Anaphylaxis.—Emery (British Medical Journal) presents an exhaustive discussion of the subject treated, first the early observations of the phenomenon and then discussing the condition in detail. Two essential factors are necessary for anaphylaxis: first, the introduction of a substance not normally occurring in the body, and, secondly, the occurrence of an interval varying in different cases, usually not less than one week before the introduction of a second dose of the same substance. The length of this incubation period depends upon the species of animal, the nature of the sensitizing substance and on the dose. A large dose tends to delay the occurrence of the anaphylactic state. The rapidity of the appearance of the symptoms after the administration of the second dose depends mainly on the rapidity with which the serum is absorbed and gains access to the tissues in which it acts. The nature of the symptoms are not influenced to any great extent by the nature of the substance to which the animal is sensitized. The symptoms in general have reference to the nervous system, respiratory system, circulatory system, digestive system and the skin. The symptoms last but a short time and the animal either dies or recovers completely. The duration of the anaphylactic state may be extremely long, even several years. The dose necessary to produce sensitiveness is extremely small and the mode of injection, whether subcutaneous, intravenous, etc., is not of great importance. The nature of the substances which may produce anaphylactic state are all, or nearly all, proteins and probably ill defined nitrogenous bodies not definitely proteid in nature. Heat will destroy the sensitizing and reacting power of proteids in proportion as it coagulates or otherwise destroys them. Certain bacterial

proteids, even if non-toxic, bring about anaphylaxis. An anaphylactic substance acts specifically, that is, the injection of a protein sensitizes the animal to that protein and to no others. Passive anaphylaxis may be produced by the injection of serum from an animal previously rendered hypersensitive in the usual way and the animal from which the serum which confers passive anaphylaxis is taken is not necessarily hypersensitive itself; that is, it may have had anti-anaphylaxis or the condition known as immunity. Anaphylactic shock may be avoided in sensitized animals either by specific or non-specific method. The non-specific method consists in the use of large doses of various hypnotics; the specific method by a series of injections of the sensitizing substance given at short intervals. Various theories of anaphylaxis are considered and most of them dismissed as unsatisfactory. It is definitely determined, however, that the phenomenon is intimately related to the formation of antibodies; that it is due directly to a combination of the antigen with the cells of the sensitized animals. Anaphylactic shock is probably dependent on the presence of sessile receptors in the cells, the combination of these with the antigen and the action of a complement. Further than this at the present time it is hardly possible to go. He discusses the possible bearings of this phenomenon on practical medicine. The Dr. calls attention to the fact that urticaria is undoubtedly due to anaphylaxis and also the interesting observation that after a first injection of serum followed by serum disease there is often a previous history of asthma or hay fever. The author does not believe in the intravenous injection of serum in patients who have had an injection previously, and in any case only when the symptoms of the disease for which the serum is given are so severe that delay might be fatal. He mentions the possibility that anaphylaxis may be of first importance in the development of infectious diseases in general and considers that there are such grave objections in the way of accepting such a theory of the pathology of infectious disease in general, mentioning especially that anaphylaxis is associated with low temperature, not fever, and is a transient phenomenon. The writer says that the tuberculin hypersensitiveness must be regarded as a phenomenon closely related to, but not identical with, anaphylactic shock. He does not believe that anaphylaxis itself is of benefit to the individual, but is a necessary state to the development of immunity to toxius.

A Case of Optic Atrophy From "606."—McNeil, Robb and Moll (Transvaal Med. Jour.) report the case of a man 31 years old who had sores on the penis and glandular enlargements. Eighteen days after .6 gm. of salvarsan were injected intramuscularly. Within a fortnight the sores had healed and he was placed on Hydr. cum Creta, $\frac{1}{2}$ grn. t. i. d. One month after he became blind in one eye and the diagnosis of optic neuritis was confirmed by an ophthalmologist. No atrophy could be discovered in the other eye. They ascribe the atrophy to the effect of the salvarsan.

Genital Hypernephromata in Women.

Alamartine and Maurizot state that aberrant suprarenal capsules are found in connection with the tissues of the broad ligaments in women, as well as in the neighborhood of the pancreas and liver; they are seldom seen in men. The suprarenals are derived from the celomic epithelium of the internal face of the mesonephron. Masses of cells become separated and form separate accessory glands. Overgrowths of the accessory suprarenal glands are rare in women; they are peculiar in that they are enucleable, but show malignancy. They cannot be diagnosed before the abdomen is opened, but when they come into view may be immediately recognized by their characteristic structure. They are seen either in young immature girls, or in women between fifty and sixty years of age. The cytological characteristics of the cells are marked, and especially the contents of fat in them. Obesity accompanies their presence. Circulatory disturbances result from hypersecretion and the production of suprarenal hormones, causing slowing of the pulse and hypertension.—*Revue de Gynecologie et de Chirurgie Abdominale.*

The Incidence of Streptococci in Urine.

Crowe states that two distinct cocci occur in the urine with comparative frequency, and both are probably streptococci. When certain symptoms suggesting slight toxemia are associated with chronic rheumatism, streptococci may usually be found in the urine. Vaccine treatment in such cases is remarkably beneficial. In acute rheumatism the organisms described are usually absent from the urine. The isolation of the organisms and the preparation of vaccines are greatly facilitated by the use of neutral red egg medium. In general, if one is justified in drawing any conclusions from the small number of cases studied by the author, streptococci are met with in the urine more frequently in slight ailments than in severe diseases. The latter believes

he has made out a case for systematic cultural examination of urine, whether attention is directed thither by symptoms or not, with the likelihood of its proving a fruitful field, both from the pathological and the therapeutic standpoint.—*Proceedings of the Royal Society of Medicine.*

Neuropathies and Psychopathies of Genital Origin.

Bossi advocates the gynecological examination of every woman who comes before a court of law for the commission of a crime, whether it be stealing, or a crime of violence, or attempted suicide, and that it be ascertained whether she has any genital anomaly before she is tried or condemned. In the same way every woman who becomes insane should go through an examination for the presence of utero-ovarian anomalies before she is sent to an insane asylum. If she has genital troubles she should be treated and will often recover entirely. It is not the serious lesions like cancer, fibroma, and peritonitis that cause alienation, but the slow, insidious infections, and the displacements that render the life of the victim insupportable, and make her unable to do her work or mix with society, that by the presence of a slow infection and the symptoms of autointoxication affect the nervous system. The author cites cases known to him and treated by him in which kleptomania occurred only at the menstrual period, which with its added nervous irritability made a criminal of the woman. Many violent crimes are the result of such a condition eventuating in a sudden access of insanity from some slight excitement occurring at a neuropathic period. It is the duty of physicians to recognize these facts and endeavor to educate the public so that these persons should receive proper gynecological treatment, instead of being incarcerated in prison or committed to asylums. Under proper treatment many a hysteric, epileptic, or insane woman will recover from both her uterine and her mental disease.—*Revue Mensuelle de Gynecologie, d'Obstetrique, et de Pediatrie.*

The Effects of Depancreatization.

Labbe studied the effects on the general nutrition of the dog of partial resection of the pancreas. When subjected to conditions giving rise to an acid intoxication the animal is capable of eliminating an excess of ammonia, like the normal dog. This would show that the functional activity of the liver is, if at all, but slightly affected. The production of urea is the same as in the normal animal. These results are not entirely in accord with those of histological examination, which show a certain degree

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of degeneration of the hepatic cells, which is probably the result of previous intoxications.—*Revue de Medecine.*

State Board Examination Questions of Indiana.

ANATOMY.

1. Give the relation of the internal abdominal ring to surrounding blood vessels.
2. Give the origin, principal branches, and distribution of the superior mesenteric artery.
3. Give the boundaries and contents of the axillary space.
4. What part of the brain is most freely supplied with blood?
5. Describe the blood supply to the liver structure.
6. Describe the large intestine and tell how it differs from the small intestine in structural arrangement.
7. Give the names of the (a) temporary teeth in their order from front to back, (b) permanent teeth in same order.
8. What nerves unite to form the brachial plexus?
9. Name the most important nerve branch of the cervical plexus, its point of origin, and its distribution.
10. Give the names and locations of the bones of the face.

PHYSIOLOGY.

1. (a) What is meant by digestion? (b) Describe the process of digestion of an egg sandwich.
2. Discuss the factors concerned in venous circulation.
3. (a) Describe a cell. (b) How are cells propagated? (c) Give the functions of nerve cells.
4. (a) Describe the vasomotor system. (b) Give its function. (c) What center controls it?
5. (a) Compare voluntary and involuntary muscle. (b) What is muscular co-ordination? (c) By what centers is it controlled? (d) What causes muscular fatigue?
6. (a) Describe the respiratory function. (b) What is meant by the terms: (1) Residual air? (2) Vital capacity?
7. (a) Give the composition of the blood. (b) Reaction. (c) Specific gravity. (d) Amount in the body. (e) Time required for a complete circulation.

MATERIA MEDICA AND THERAPEUTICS.

1. Define solvent. Mention three principal solvents.
2. Define diaphoresis. Mention three diaphoretics and state the dose of each.
3. State the name and the dose of each of two cardiac stimulants.
4. In what form is iodine most frequently

administered internally? What is the antidote for free iodine?

5. What serious results may ensue from the indiscriminate use of acetanilid?
6. Mention the conditions which affect the dosage of medicines.
7. What is cumulative action? Name one drug that has this tendency, and give symptoms of such action.
8. Name and describe three antiseptics useful for internal medication.
9. Name three indications for the use of opium.
10. How and when would you perform hypodermoclysis?

CHEMISTRY.

1. Give the formula for the two chief products of yeast fermentation of sugar and state the differences, if any, in the action of yeast upon cane sugar, milk sugar, and grape sugar.
2. State the chief differences between fixed and volatile oil and name three of each class that are extensively used in medicine.
3. Give the chemical composition and properties of ammonia gas.
4. Give the approximate constituents of cow's milk.
5. Give the chemical formula for urea and what is the normal amount excreted daily by an average adult.

PHYSICAL DIAGNOSIS.

1. Give physical signs of aneurysm of the thoracic aorta.
2. Give cardinal symptoms by which you can diagnose a case of appendicitis.
3. Give topographical anatomy of the heart and its valves.
4. (a) Give normal temperature of the body. (b) Give normal pulse (frequency).
5. If a man or woman, past middle age, complaining of constant slight vertigo, intensified on excitement or exertion, presents sclerosed arteries, arcus senilis, and ringing aortic closure, with or without moderate cardiac hypertrophy, what would be your diagnosis?

PATHOLOGY AND BACTERIOLOGY.

1. Define in contrast infection and intoxication.
2. What do you understand by phagocytosis, and what is its relation to immunization?
3. From what does thrombosis of the portal vein most frequently result?
4. From what does chronic gastritis most frequently result?
5. Name the pathological conditions most commonly found in the lymphatic glands.
6. How would you demonstrate the pres-

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ence of the amœba colic in a case of amœbic dysentery?

7. How would you demonstrate the efficiency of a germicide?

8. Describe one method by which you can demonstrate the agglutination of bacteria by blood serum.

9. What bacteria most frequently cause puerperal infection?

10. Examine and name the pathogenic organisms under the microscopes No. 1, No. 2, No. 3.

ETIOLOGY AND HYGIENE.

1. Give the accredited causes of malaria and yellow fever and tell what measures afford the best means of protection from infection.

2. How are impurities in water classified; how can they be detected, and why is the presence of organic material in drinking water deleterious?

3. Illustrate the theory of immunity by means of antitoxin.

4. Is infantile paralysis infectious? If so, give rules for protecting the community.

5. Give etiology of: (a) hepatic abscess, (b) cardiac hypertrophy, (c) edema of the lungs.

PRACTICE.

1. Write in parallel columns the diagnostic symptoms of measles and smallpox.

2. Write in parallel columns the diagnostic symptoms of neuralgia and myalgia.

3. Mention the forms of insanity, and give the most common causes.

4. Give a differential diagnosis of pleurisy and pneumonia.

5. What are the average durations of the febrile stages in the following forms of disease: Typhoid fever, scarlet fever, measles, rheumatic fever, and pneumonia?

6. Give the symptoms of greatest diagnostic importance in locomotor ataxia.

7. Give the pathognomonic symptoms of hysteria.

8. Give symptoms and treatment of incipient phthisis.

9. What forms of disease present symptoms during the first three days resembling variola?

10. With what form of disease may scarlatina be confounded prior to the appearance of eruption?

Conservative Treatment of Aneurysms and Hematomata.

Monard and Vanverts state that the surgical treatment of aneurysm includes extirpation, incision, or obliteration of the sac. For aneurysms of the neck and limbs the proportion of cures is 74 per cent. for ligation, 80 per cent. for incision, 90 per cent.

for obliteration, and 89 per cent. for aneurysmorrhaphy. After careful consideration of the different methods of operation and their results the authors give the following conclusions: conservation operations are characterized by a considerable number of successes and an almost complete absence of gangrene; but recurrences and postoperative hemorrhages are somewhat frequent, due to insufficient solid union of the vessel walls. The artery generally remains permeable immediately after the operation. After some days this permeability seems to disappear in a considerable number of cases; but this secondary thrombosis has few inconveniences, since the collateral circulation has been established before arterial obstruction became complete. Arterial lesions of traumatic origin are easier to treat than others because of the less friable condition of the arterial walls. —*Revue de Chirurgie.*

Treatment of Syphilis by Hectine and Hectargyre.

Dive presents his conclusions derived from the use of hectine and hectargyre in the treatment of syphilis in its various stages. Hectine is less toxic than the other derivatives of arsenic. It becomes localized in the muscles and skin, and hence causes the rapid resorption of cutaneous lesions. It may be applied subcutaneously in powder, or may be used in the form of an ointment. In pill form it is perfectly tolerated by the alimentary canal and acts well, being stable. It causes some pain when injected but no active inflammation. Injected in the thigh muscles it is generally painless. It increases the number of red and white blood cells, and the amount of hemoglobin. Its curative action is very rapid with respect to the chancre, the skin and mucous eruptions, the headache, gumata, scleroses, or ulcerations. It has little effect in paresis. When vision becomes affected the remedy should be stopped. Hectargyre may be advantageously combined with mercury. It is most used in malignant and precocious cases and in tertiary syphilis. It is well tolerated when taken by the mouth and when injected it causes neither induration nor infiltration, nor great pain. Injections should be made into the thigh muscles in the same manner as for hectine. —*Gazette des Praticiens.*

Congenital Rickets.

Labbe considers that there can be no doubt that children are born with evidences at birth of a rachitic process exactly similar to those seen in older children. The process has gone on in the uterus before

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birth, and malformations have resulted. It is very difficult to assign to this disease strict limits; there are other conditions that are difficult to differentiate; such are achondroplasia, periosteal diplasia, etc. which may be distinct diseases or simply types of the same disease. Mixed cases in which several of these conditions are combined are not rare. The etiology is still confused the causes invoked are multiple; they are toxi-infections, heredosyphilis, and predispositions. Distinctions between rickets, achondroplasia, and periosteal diplasia are founded on pathological anatomy alone the lesions are brought about by the same cause acting with greater or less virulence, intensity, and duration, and the effect depends on the resistance of the organism; they thus may produce very different lesions. New studies of uterine conditions and those begun at birth are needed in this line.—*Revue Mensuelle ds Gynecologie, d'Obstetrique et de Pediatrie*—

Treatment of Uterine Fibromata by Radium.

Cheron states that radium is of great value

in the treatment of small pelvi-abdominal fibromata, especially when so deep seated that they cannot be reached by the x-rays. The first effect of the application is the arrest of hemorrhages and the moderation of the menstrual period. It also lessens pressure and pain by the decongestion that is produced in the uterus and in the tumor. A definite menopause will be established if the application be persisted in. At the same time the ovaries will not be caused to atrophy, and pregnancy will occur in cases in which the menopause is not produced. Contraindications are malignant degeneration of the tumor, severe hemorrhage with marked anemia which will require a rapid effect, and cases with dangerous compression or symptoms of torsion of the ureters. The application is made by placing the tube in the cervix reaching up to the isthmus, and using one which gives out the ultra-penetrating rays. It should be kept in place eight hours, and the application repeated every three or four days for twelve sittings, if it is desired to establish the menopause.

—*Journal de Medecine de Paris.*

A Note on Bacterial Symbiosis.—Chas. Johnson, in *The Dublin Medical Journal*, says that the action of two species of bacteria grown in the same culture medium is mutually antagonistic and destructive, symbiotic relations between bacteria and other fungi and among the various species of bacteria are well known. The question of how the symbionts interact is not quite clear. Ward holds the secretion of one bacterium may stimulate the other by containing "some body which acts as an exciting drug to the other." Food may be provided each for each, or one species may protect another from unfavorable influences, as in the case of an aerobe absorbing the surrounding oxygen so that an anaerobe can propagate. Winogradsky pointed out that the anaerobic *Clostridium pasteurianum*, if supplied with dextrose, can fix atmospheric nitrogen only when protected from oxygen by the presence of aerobic species. On the other hand, neither *Bacillus coli* nor *B. denitrificans* can reduce nitrates alone, but when both together act on a solution of sodium nitrate free nitrogen is evolved. In human infection by *B. tetani* many have shown that other bacteria or some foreign body must be present or the bacillus will not exercise its virulence. The rarity of tetanus, in spite of the fairly wide distribution of the causative micro-organism, is thus explained by the absence from wounds of auxiliary varieties. In this case the auxiliaries are believed to damage the tissues to such an extent that resistance of the latter to the multiplication of the tetanus bacillus is greatly weakened. A remarkable example of symbiotic action is seen in the effects of growing *Bacillus chauvoei* and *Micrococcus acidiparalactici* in a solution of cane-sugar. If the latter act alone optically active para-lactic acid is obtained, while *B. chauvoei* alone forms normal butyric acid, inactive lactic acid, carbon-dioxide and hydrogen. Acting together they produce large quantities of normal butyl alcohol.

Typical examples of symbioses between bacteria and higher fungi are observed in the "ginger-beer plant" and in "kephir." The former is composed essentially of a yeast (*Saccharomyces pyriformis*) which co-operates with the *Bacillus vermiformis*. Other yeast fungi, bacteria and other moulds were found in different specimens by Marshall Ward. The "kephir-grains" which produce the effervescent, alcoholic, sour-milk beverage of the Caucasus owe their fermentative properties to threads of rod-shaped bacteria, called *Dispora caucasica* by Kern, certain yeasts and moulds being invariably present. The brandies and sake obtained by oriental nations from the fer-

mentation of rice are also due to symbiotic interactions. Among the many commonplace but important phenomena due to bacterial symbioses may be mentioned the "rising" of bread. Peters says three yeasts and a *Mycoderma* are concerned in the fermentation of black bread—the former producing carbon dioxide, the latter alcohol, fatty acids, and water. The volatilization of these and the expansion of air cause the "rising" of the dough. Lehmann considers that *Bacillus levans* predominates, but that the yeast present assists in the process. In certain cases yeast is the only active ferment of white bread.

Treatment of Metrorrhagia.—Alcorta, (*Clinica y Laboratorio*) recommends tamponade of the uterine cavity with iodoform gauze in the treatment of persistent metrorrhagia following abortion. After attempting without success, in such a case, to remove the remnants of membrane from the uterus by the digital method, he left the patient with a strip of the gauze in the uterine cavity, intending to perform an instrumental curettage the next day. When the time came, however, to remove the gauze, remnants of placental tissue were found attached to it. The Dr. therefore limited to a renewal of the gauze, with the result that two days later the uterus was entirely empty. There was no fever in this case either before or after the intervention. Similar good results were obtained later in other cases. Alcorta asserts that by employing this method the necessity of curettage with the attendant danger of bacterial contamination is often done away with in cases of retention of membranes without infection.

Subarachnoid haemorrhage in a child.

—M. Griquet (*Progres. med.*) publishes the case of a girl, aged 12½ years, child of a father the subject of laryngeal tuberculosis who was seized after exposure to run with violent pain in the head, diarrhoea, nausea and twitching. Complete coma ensued with stertorous breathing, jactitation, dilatation of pupils on both sides. Knee-jerk exaggerated on right side, almost none on left. Kernig's and contra-lateral signs. Contraction of back. Hardly any appreciable nuchal contraction. Three leeches ordered to the right mastoid, sinapisms to feet, and enema of chloral. The coma disappeared and the patient complained of drowsiness and severe pain in the right temple. Lumbar puncture with-draw a liquid, which flowed rapidly and under tension and was distinctly hæmorrhagic. Lymphocytes 94 per cent., polynuclears 5 per cent., eosinophiles 1 per cent. no meningococci. Culti-reaction negative. Recovery in about three months. With the

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family history and lymphocytosis of the cerebro spinal fluid the case seemed at first one of tuberculous meningitis. The subsequent course, however, was against it, and a sudden onset is very rare except in young infants. In this case most of the signs of subarachnoid were present, an apoplectiform condition indicative of a sudden invasion, coma, which is always of short duration in purely meningeal hæmorrhage, contractures and blood in the cerebro-spinal fluid. Fever was noticed after the onset, attaining its maximum at the time when an improvement took place in the general condition. This "hæmolytic fever", or fever of absorption is of favourable import. The ætiology of the case was obscure. Recovery was complete except for a slight paresis which was rapidly disappearing.—*British Journal of Children Diseases.*

Action of the X-Rays on the Nervous System and Radiotherapy in Nervous Diseases.

de Luca has examined the literature as to the effect of the x-rays on the nervous system, has experimented on animals, and has employed the rays in a number of patients. He concludes that in no case has there been any harm done to the nervous system by the application of the x-rays. While the normal nerve elements remain unaltered the rays have a selective action on pathological nerve cells, since these are young tissue derived from pre-existing elements, such as the neuroglia, the ependymal cell, and the vascular and connective tissues, or consist of heterogeneous elements, as in the case of tumors. There is a special effect manifested by the x-rays on diseases of the spinal medulla, such as syringomyelia, in which the substratum is formed of gliomatous new-formed tissue with abnormal cavities. Here there is really a new formation, and on this the rays act promptly and specifically because they are

rich in nuclein. There is an arrest of the degeneration and a diminution of the pressure of the new growth on the elements of the gray and white matter of the spinal medulla, and thus an improvement of the disturbances of sensibility and motility. Histories of appropriate cases are given.—*Rivista Ospidaliara.*

"The value of the antitoxin treatment of diphtheria has been abundantly proved, but may have certain ill results, which are not due to the antitoxin but to the horse serum containing it, and also may be produced by the serum used for other diseases—tetanus, streptococcic infection, etc.

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Serum Diagnosis in Infantile Heredo-Syphilis and Family Syphilis.—Leroux and Labbe (Arch. de med. des enf.) report their investigations on this subject carried on at the Furtado-Heine Dispensary, Paris. They obtained a positive reaction in nearly all cases of early heredo-syphilis with active symptoms, in 85 per cent. of late heredo-syphilis, in 11 per cent. of latent cases; in heredo-parasyphilis (dystrophies and degenerations) and in healthy children born of syphilitic parents the reaction was always negative. The mothers of syphilitic children gave a positive reaction in 71 per cent. of cases, whether they had symptoms of syphilis or not. The fathers of syphilitic children gave it in 42 per cent. The authors conclude: (1) That maternal syphilis is more often conceptional than derived by direct infection from the father. (2) That the mother is infected in the great majority of cases; hence the rarity of purely paternal transmission. (3) That active maternal syphilis with a positive reaction generally gives rise to virulent infantile syphilis, sometimes to latent syphilis with positive reaction, more rarely to infantile syphilis with negative reaction, occasionally to healthy children. (4) That latent maternal syphilis with negative reaction nearly always gives rise to parasyphilis or to healthy children, occasionally to syphilitic children with positive reaction, with or without symptoms. (5) That paternal syphilis (the mother being healthy with positive reaction) only gives rise to parasyphilis with negative reaction or to healthy children. (6) That if the father and child give a positive reaction, so does the mother always. (7) That treatment has no constant effect on the reaction, and the latter gives no certain therapeutic indications. Serum diagnosis gives no precise information as to cure or immunity.—British Journal of Children's Diseases.

Chaulmoogra Oil in Leprosy.

Sandes writes that the chaulmoogra oil treatment, although slow and at best not

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very satisfactory, is still superior to any other remedy that we know. He emphasizes that the use of the oil must be prolonged, five years or more; it must be as far as possible continuous, and the imbibition of the oil should be pushed gradually to the extreme of receptivity. Relapses will undoubtedly occur, particularly in the earlier stages, but such should not be permitted to foster discouragement. To expect sudden amelioration is to look for disappointment. Surgical assistance should always be ready to intervene where natural processes or medical applications have failed in discarding devitalized tissues or opposing inflammation.—Jour. Trop. Med. and Hygiene.

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bacteriological and histological examinations will be made as the case requires.

The following directions are suggested for the benefit of those who may forward material for examination.

All specimens should be accompanied by a brief note descriptive of the clinical condition and a special reference to the character of the examination desired.



The Main Building Front View.



Seventh Street Entrance.

The name and address of the person to whom the report is to be sent should be clearly indicated.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test.

— After carefully washing, prick the lobule of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and they have dried, the

allowed to dry without being spread out on the surface of the slide.

slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—

Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count, etc., should be sent to the laboratory on glass slides. As thin a smear as possible should be made.

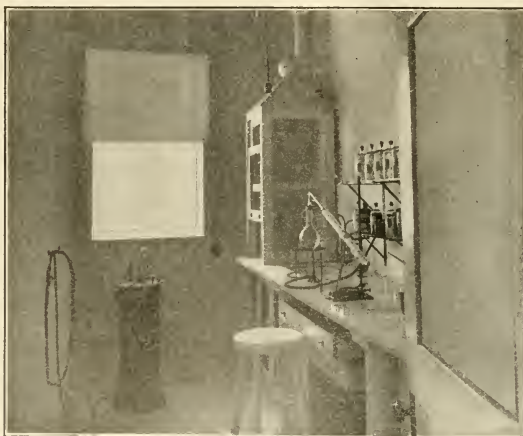
Smears For The Detection of Gonococci.—

One drop of purulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made over the surface of the slide.

In collecting a specimen from a female patient, care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.



Clinical Laboratory, Showing Arrangement of Desks, Microscopes, Microtomes, Incubator, Centrifuge, Etc



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operation or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiled paper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and the material from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in the bottom of the jar before

Urine.—for bacteriological examination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlich's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Pathological.—

material from either op-

the tumoris dropped in.

Feces.—should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

Wassermann's Test.—Since the advent of the discovery of 606 for the cure of Syphilis, the employment of the Wasserman test, both before and after its use, is conceded by all scientific investigators to be of the highest importance as a control to the curative effect of this remedy. The Charlotte Sanatorium Laboratory is specially equipped for carrying out this Wasserman Sero-diagnosis test for Syphilis.

Specimens sent to the laboratory for this test should be obtained as follows.

1st. By using an ordinary antitoxin syringe, and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourniquet applied, taken the blood from the vein by means of the syringe



(Clinical Laboratory. Showing Supplies, Working Table. Etc)

2nd. By means of capillary attraction, as

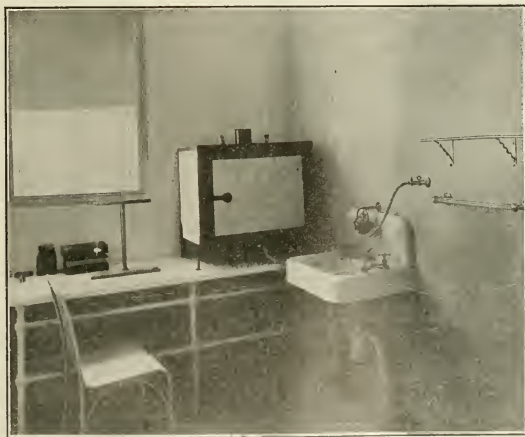
illustrated in Fig. 11 represents empty capsule; tourniquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tube, allow

to coagulate, cork, pack and mail as any other fragile package. At least two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.—The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.—should be sent in a sterilized bottle. A large vaseline or quinine bottle usually answers the purpose.



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Fig I



Fig II.

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Microscopical ... 1.00
Complete analysis 1.50

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.....5.00
Feces Examination 2 00
Blood Culture ... 5.00
Cultures and isolation of bacteria..... 5.00
Stomach Contents 2.00
Widal Test..... 2.50
Tissue Sections.. 5.00
Tuberculin Test 5.00
Wassermann's Test 10.00

Milk.

Chemical 2.50
Bacterial 5.00
Water analysis, bacterial examination.. 5.00
Chemical examination including alkalinity, chlorides, ammonia, nitrites and nitrates...5.00
Quantitative analysis \$10.00 to 25.00
Culture Media (per tube) 25
Sterilized tubes and pipettes 15
Coagulation time 2.50
Vaccines 10.00
Sterilized Tubes with

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Hay-Fever Hints.

We are now well into the season when the services of the physician are urgently demanded by the victim of vasomotor rhinitis—a season dreaded not alone by the patient, but, not uncommonly, by his medical adviser as well. Particularly is this true of the latter if he has not kept abreast of the most modern ideas on the therapy of hay fever. In any event the disease is one that tries the patience and calls for the application of remedial agents that have been proven beyond peradventure.

In the treatment of hay fever the physician rarely has an opportunity for the application of preventive measures. His help is usually sought only after the attack has manifested itself—when the patient is suffering (acutely, in most cases) from the ravages of the disease. Effective treatment is then demanded—and promptly, too. Administration of the suprarenal substance in the form of its isolated active principle, Adrenalin, is undoubtedly the wise procedure at this juncture. One feels safe in saying this in view of the long and effective service which has been rendered by this agent in critical emergencies.

There are a number of forms in which Adrenalin is successfully used in the treatment of hay fever. Adrenalin Chloride Solution and Adrenalin Inhalant come naturally to mind in this connection. The substance is also incorporated in the several Anesthone preparations—in Anesthone Cream, Anesthone Inhalant, and Anesthone Tape, all worthy of confidence, and especially worthy of trial in cases in which for any reason the older Adrenalin products seem not to be indicated. The Adrenalin and Anesthone products, as is well known perhaps to most physicians, are manufactured by Park' Davis & Co. An exposition of their uses in the malady in question, together with the technique of administration, is now appearing in the commercial pages of the leading medical publications. Practitioners are advised to consult these current announcements.

A very satisfactory prescription in respiratory disorders, both of acute and chronic forms, will be found in the Tilden Company's Respirazone.

Use of Suprarenal Preparation in Tuberculosis.—(Paris Medical) says that the use of suprarenal preparations in tuberculosis should be considered under three headings: 1, In the presence of adrenal insufficiency. Sezary has shown the frequent occurrence of sclerosis of the adrenals in tuberculosis, while Boinet has reported



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cases of tuberculosis with Addisonian symptoms (in the absence of skin pigmentation, however), in which relief was obtained with adrenal preparations. Sergeant states that he has seen a number of tuberculous patients with muscular weakness, anorexia, emia, and loss of weight out of proportion with the extent of pulmonary disease, in whom the administration daily of 0.3 to 0.6 gramme of dried suprarenal gland caused marked improvement.

2 In cases where, owing to profound toxemia, great extent of pulmonary lesions, appearance of pneumothorax, or owing to pressure from an extensive pleural effusion, myocardial enfeeblement and collapse take place. Here, independently of adrenal insufficiency, epinephrin may give good results. It may be given either by mouth, in doses of five or six minims of the one to 1.000 solution, every four hours, or subcutaneously, 0.0005 gramme being given by hypodermoclysis in one half litre of salt solution. In hemoptysis Sergeant advises the use of epinephrin.

3. As an adjuvant to Ferrier's recalcification treatment. The efficacy of epinephrin in osteomalacia is well known, and is attributed by Gley to an influence it exerts on recalcification. Carnot and Salvi showed that experimentally fractured bones healed more rapidly under epinephrin. For the last two years Sergeant has been giving epinephrin in pulmonary, osseous, and peritoneal tuberculosis, both in children and adults, in combination with the recalcification method. He noted rather constantly a diminution in phosphaturia and urinary acidity, and in some cases a more prompt appearance of the signs of recalcification. The best results were obtained in children and in bony and peritoneal tuberculosis—especially in Pott's disease. In pulmonary tuberculosis of adults the epinephrin had sometimes to be stopped owing to the appearance of blood in the sputum, and benefit could therefore not be obtained. In children below seventeen years of age, however, less subject to hemoptysis, and more active in calcium fixation than are adults, epinephrin could be used more freely and greater benefit obtained. The drug was given in fractional doses amounting to 0.001 or 0.002 gramme per diem; after every ten days of use, the drug was stopped for five or six days. When it is used in adults the blood pressure and sputum should be watched.

Medical Treatment of Exophthalmic Goitre.—Hartenberg (*Journal de médecine de Paris*) the writer says that a combination of drug treatment with electrotherapy in this affection is advisable. The writer ap-

plies the galvanic current, at 60 to 80 milliamperes, to the thyroid every day, or on alternate days, for half an hour. The positive electrode should be a thick one, as well as broad enough to cover the lateral portions of the enlarged thyroid. The negative electrode is placed on the back in the lower dorsal or lumbar region, in order that the current shall be a descending one. The drug treatment consists of a cachet containing 0.8 gramme of potassium bromide and 0.3 gramme of quinine sulphate, which is taken at each meal. Further measures and advice are obviously necessary for digestive troubles, menstrual irregularities, general weakness, etc. Followed for two or three months, this treatment causes a marked reduction in the size of the neck and of exophthalmos, a return of the heart rate to normal, not infrequently improved vision, and disappearance of psychic manifestations. In a number of cases the benefit obtained was permanent; in others, a tendency to recurrence showed itself, which, however, yielded readily to repeated treatment. As a prophylactic measure, it is advisable to prescribe one or two seances of electric treatment and a resumption of the cachets for a week in every month.

Diabetes and the Ductless Glands.

After reviewing from the theoretical standpoint the relations existing between the internal secretory glands and glycosuria, the author calls attention to the fact that there is a tendency at the present time to revert to the doctrine that overproduction of sugar is the main cause of diabetes, and to abandon the theory that diminished consumption by the tissues is the essential element. This view is now held by a number of eminent observers, including von Noorden, who consider that the hyperglycemia and consequent glycosuria are due to an excessive output of sugar by the liver, and that this may arise from excessive stimulation or impaired inhibition. The stimulus to the liver may come from an excess of carbohydrate food, as in alimentary glycosuria; from an increased call by the tissues, from hyperfunction of the suprarenals, etc., or from the central nervous system through the medium of the chromaffine system. Impaired inhibition may arise from suppression or impairment of the functions of the pancreas, or from interference with the controlling action of the thyroid or hypophysis on that organ. In some cases also there is probably a primary anomaly of the liver cells themselves.

The views at present held with regard to the interaction of the ductless glands and

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their part in the production of diabetes are to some extent theoretical, and this is particularly so as regards the chromaffine system, but they correlate in a much more satisfactory manner than has previously been possible the experimental data that have accumulated as to the effects of these organs on carbohydrate metabolism, and they bring into line the known facts in the etiology of diabetes. Whether subsequent observation confirms, or in part disproves, these theories, there can be no doubt that they open up a wider conception of the possible pathology of glycosuria, and indicate that it is not a sign of one disease, but a symptom common to several diseases.—Cambridge, in *The London Practitioner*.

Sarcoma of the Ilium Treated by Coley's Fluid.

Carless reports the case of a patient, aged 49, who was admitted to the hospital in October, 1909, and whose symptoms existed for eighteen months before that date. At first he complained of pain in the buttocks and calf, which were supposed to be sciatica, and the tumor was not noticed till just before his admission. It then extended from the right iliac fossa upwards as far as the rib margin and back to the spine, filling the right lumbar region. It was hard and immobile, fixed firmly to the innominate bone and to the lumbar spine. At first the pain was so severe that morphine was required, even when he lay in bed. Operation being hopeless, treatment by Coley's fluid was undertaken. When exhibited in February, 1910, his condition was much improved, the pain was absent, and the swelling had decreased in size. Since that date several courses of Coley's fluid have been administered, and the swelling has gradually shrunk, the patient being able to get about and complaining of no pain. Nothing has been undertaken in the shape of treatment for six or eight months.—*Proceedings of the Royal Society of Medicine*.

Syphilis and Pregnancy.

Mangiagalli believes that the birth of a macerated fetus is not always evidence of parental syphilis, but is generally presumptive evidence of infection of the mother. Maceration is only a physiological phenomenon due to the presence of the fetus in the amniotic fluid, with a certain temperature and without air. Examination of the tissues of the fetus may show the spirochetes; or changes in the internal organs of the nature of sclerosis may equally show the presence of syphilis. The syphilitic placenta is also very large, edematous, yellowish-gray and sclerotic; and the cord

shows similar changes. It is a question whether syphilitic infection of the ovule or spermatozoon may occur. But it has been shown that the fetus may be infected through the placenta, with the production of congenital syphilis, for the spirochetes have been found in the placenta and in the cord. These organisms have been demonstrated in the testicle and spermatic passages, but not as yet in the spermatozoon. Hereditary dystrophy may also result from transmission of the poisons without the spirochetes. When the father is healthy, but the mother infected, infection reaches the fetus by way of the placenta. If both parents are healthy at conception, and infected later than the sixth month, the fetus may still be healthy. It may be safely nursed by its mother since it possesses a sort of immunity conferred by the mother. The transmissibility of the disease lessens with time, especially in the male. The female may continue to abort long after the father seems to be healthy. As to treatment of the fetus, this should be carried out directly by means of mercurial inoculation and not through the milk of the mother, since this method is too slow.—*La Riforma Medica*.

Osteitis Deformans with Chronic Eczema.

Weber reports the case of a compositor, aged 70, who presented the typical thickening and bending of the tibia and femora characteristic of osteitis deformans. The disease was as yet of only moderate degree, and was limited to his lower extremities. The changes commenced, or at least were first observed, in the left tibia six years ago, and at present they were best marked in that bone and the left femur. The eczema, to which he had been subject more or less for many years, at present chiefly affected his legs. On the whole the patient seemed to have enjoyed good general health, but had suffered twice from rheumatic fever, forty and twenty-four years ago, respectively. There was no history of any venereal disease. Nothing abnormal could be discovered in the thoracic or abdominal viscera or in the urine. A noteworthy feature of the present case was that as yet there had been no pain connected with the bone disease.—*Proceedings of the Royal Society of Medicine*.

The Dangers of Pertussis and Its Relation to Tuberculosis.

Saint-Philippe believes that whooping cough often lays the foundation for tuberculosis, chronic bronchitis, and emphysema. Abortive cases of pertussis or those without a whoop constitute one-sixth of all cases of

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THE CHARLOTTE SANATORIUM, CHARLOTTE, N. C.

the disease. The diagnosis should be made from the obstinate spasmodic cough with vomiting, the profuse expectoration, the discharge from the eyes and nose, and the congested face. Examination of the sputum reveals the bacillus of Bordet and Gangou, the causative micro-organism, and the blood shows leucocytosis. Early diagnosis and proper treatment may enable one to prevent the serious complications, broncho-pneumonia, and prolonged bronchitis. The disease is seldom directly fatal, but frequently children die from the sequelæ. The co existence of measles and pertussis renders the latter much more than ordinarily fatal.—Journal de Medicine de Paris.

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Acute General Paralysis.

In a clinical lecture on "Paralysies generales rapides," Professor J. Lepine, of Lyons, discusses the question of the duration of general paralysis. The opinions of the various authors who have written on this subject greatly differ, some authors considering that a year or a year and a half is the most common duration of the disease, while others state that death occurs only after five years or more. About one-tenth of the cases seen by Professor Lepine had a very rapid evolution of less than a year. According to Professor Lepine's experience the cases which have such a rapid evolution may be divided into three main classes. First class: "Intellectuals"—i.e., patients whose brain has had severe and prolonged overwork; among these patients belonging to liberal professions are very frequently met with. Second class: Patients without overwork, but with irregular hygiene, like railway officials or omnibus drivers. Third class: Syphilitic patients whose mercurial treatment has not been carefully conducted or supervised. These patients have neglected Professor Fournier's advice—energetic treatment at the beginning, "safety treatment in the later stages, and rest during the intervals." To sum up, Professor Lepine thinks that if the average duration of general paralysis seems to be longer nowadays it is because we are able to make an early diagnosis; conversely there seems to be nowadays an increase in the number of the cases with a rapid evolution.—Le Progres Medical.

The Diagnosis of Chronic Icterus.

After a rapid resume of the various causes of jaundice, Professor A. Cade, of Lyons, divides the chronic cases which are the subject of his lecture into two main classes: The variety in which bile is eliminated with the urine, and the variety in which urobilin only is found in the urine. Occasionally these two varieties may alternate in the same patient. Professor Cade reports in great detail a typical case of chronic jaundice with choluria, discoloration of the faeces and dilatation of the gall-bladder. The macroscopical, microscopical, and chemical examination of the faeces—and Professor Cade lays great stress on these different tests—is nowadays the best and safest way to settle the diagnosis, and the various tests according to the various forms of the disease are very clearly explained in this very interesting lecture.—Le Progres Medical.

Danger Due to Substitution.

Hardly another of all the preparations in

existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm names of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribed. No "just as good" allowed.

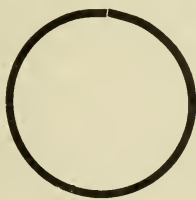
Surgical Treatment of Poliomyelitis.

Lange (Munch. med. Wochensch.) advises the application of a plaster-of-Paris bandage during the first stage, which is often followed by subsidence of pain. To promote regeneration of the paralyzed muscles electricity and massage, as well as heat, were found useful, while for the prevention of contractures Lange prefers a light celluloid gauze splint. If contractures have resulted they are removed by tenotomy and redressement. Later tendon transplantation is usually necessary, but nerve transplantation is not indicated in this disease. In general, tendon transplantation is not to be undertaken before the fourth year. If possible, the entire muscle is transplanted, the periosteal method being most advantageous because securing better fixation. Early resort to movements is important, except in cases where fixation is necessary. Professor Vulpius says that the minimum time at which tendon transplantation can be performed is the first year. In the shoulder joint more is to be expected from arthrodesis than from tendon transplantation, while conditions are reversed in the elbow joint. Plastic work is desirable in the hip joint, and at the knee transplantation gives good results. Though the social state of the patient should be the deciding factor in considering the mode of operation on the foot—whether tendon transplantation or arthrodesis—the latter is often preferable because requiring less time. Unlike Lange, Vulpius considers the periosteal method the exceptional one.

"In the employment of a poultice for the relief of pain and inflammation, it is most essential that a sterile and trustworthy product be applied.

"That skin affections have been added to the original disorder when bread-and-milk or linseed poultices have been used to relieve pain," as pointed out by Prof. George Howard Hoxie, emphasizes the employment of antiphlogistine, not only as a superior hot moist dressing, but as the doctor says, "because this is both sterile and clean."

That hot moist heat is, when properly applied a most valuable factor in the treatment of inflammation, whether deep or superficial, is generally accepted and that antiphlogistine is the most adaptable and satisfactory method of realizing therapeutic value seems to be acknowledged by professional preferment."



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No. 3.

A Clinical Study of Some Cases of Sudden Death.

By Lewis M. Gaines, M.D., Atlanta, Ga., Professor Neurology Atlanta School of Medicine, Neurologist to Wesley Memorial Hospital, Tabernacle Infirmary and Georgian Hospital, Physician to Home for Incurables.

Sudden death is a contingency greatly dreaded by the majority of mankind. To be suddenly launched into eternity without warning makes even the strongest shudder. To the friends and relatives of one who has thus passed away, perhaps in the very midst of his daily routine, the shock is always very great, and the poignancy of their grief far more marked than when they have been gradually brought to realize an inevitably approaching dissolution. Every physician in general practice encounters these distressing cases of sudden death. The inquiry is often made "Could not this occurrence have been foreseen?"

In this brief paper, I desire to deal with certain cases of sudden death, apart from those due to violence, and inquire what are the conditions in which sudden death may occur, what symptoms, if any, should put the physician on his guard, and what physical signs may be revealed as the result of searching examination, which would lead one to suspect the possibility of sudden death.

The matter of prognosis, in cases which may terminate in sudden death, is of the greatest importance. A man who realizes that such an event may overtake him, if he be wise, proceeds to set his affairs in order, and provide for the future welfare of those dependent upon him. How many of us have seen the head of a family suddenly stricken dead, and his dependents left in distressing circumstances, due to lack of the knowledge which might have averted the calamity. Furthermore, if the patient be acquainted with the gravity of his situation, he may be induced to take such precautions as will diminish the probability of sudden death, or at least prolong his life. Finally, there are cases in which conditions favorable to the occurrence of sudden death are of temporary duration. If the proper precautions are observed during such a period, the patient is tided over a time of the most extreme gravity.

The conditions which are likely to result in sudden death are very simple, and one might say mechanical. Briefly stated, they are radical changes occurring in the circu-

latory or respiratory systems. Among these circulatory changes are cases of overwhelming pulmonary hæmorrhage occurring usually rather late in pulmonary tuberculosis, cases of rupture of an aneurism, or of exsanguination from a typhoid or gastric ulcer. Also included under this head are cases of acute cardiac dilatation, which constitutes what is popularly known as "heart failure." These cases of acute cardiac dilatation may be divided into two classes. In the first class I would place those cases of chronic cardiopathy, where hypertrophy and dilatation are known to be taking place, as in many forms of valvular disease, especially aortic insufficiency, cases of myocardial disease, and cases of chronic interstitial nephritis, which has been very well termed nephro-cardiopathy, where the associated heart changes are marked. In such conditions acute fatal dilatation is frequently a result of sudden strain.

In the second class I would place cases in which degenerative processes in the heart musculature are known to occur as the result of acute infections. Such degenerative processes frequently occur in the course of diphtheria, pneumonia, typhoid fever, influenza, less commonly in some other infections; In such cases acute fatal dilatation may occur while the heart is in this condition. Such a condition of the heart musculature, however, is usually temporary, and capable of complete recovery, provided proper precautions are taken. Among the changes occurring in the respiratory system are probably the cases of cerebral hæmorrhage which result in immediate death, due to extravasation of blood into or around the respiratory center in the medulla, as well as cases of brain tumors pressing suddenly upon the center, as in the case of a man whose history I shall narrate.

It is evident that it is a matter of the first importance to recognize these various diseased conditions if we are to be in a position to warn our patients in time when they are exposed to the danger of sudden death. Some of these conditions are easily recognized, others with the greatest difficulty. In a case of advanced phthisis in which hæmorrhages of greater or less extent may or may not have been a marked feature, it is not difficult to recognize the possibility of a sudden exit by hæmorrhage. The same is true of aortic aneurism. In typhoid fever, the hæmorrhagic cases are usually recognized. However, when I was a medical

student, a man walked into the receiving room of the hospital, evidently ill, but by no means in extremis. He was immediately sent to the ward in charge of an attendant. On his way thither, in the corridor, he suddenly sank to the floor, and died in a very few minutes, almost exsanguinated from an overwhelming hæmorrhage from the bowels. Autopsy disclosed extensive typhoid ulcers in the ileum.

Acute infections such as influenza, pneumonia, diphtheria, typhoid fever are usually correctly diagnosed, yet there is danger of overlooking the possibility of sudden death from cardiac dilatation, especially just before and during convalescence. I knew a typhoid patient who had become afebrile, who died suddenly while on the bed-pan straining to have an evacuation. Acute cardiac dilatation overtook him. Had the weakness of the heart been fully realized the catastrophe might have been averted. Sudden death in diphtheria, especially during the early part of convalescence, is by no means infrequent. In influenza there is a marked toxic effect upon the heart muscle. A young man who had always enjoyed good health until a moderately severe attack of influenza, was convalescing, but still confined to bed. He remarked to his young wife that he felt so well he believed he would sit up to eat his breakfast which she had just brought him. So saying, he sat up suddenly, and immediately sank back on the pillows dead. This case came under my own notice. I felt fortunate that I was not the attending physician, to whom, however, no blame could have attached except the failure to give a warning against sudden exertion.

More difficult is the diagnosis, especially the early diagnosis, of many cases of cardiopathy, or chronic interstitial nephritis associated with the inevitable cardiac changes. It is frequently public announced that the victim of sudden death had been in perfect health. In almost every case, careful examination will disclose the fact that this was not true. A personal friend of my own, a robust looking man of forty-five, died suddenly on a Pullman car something over a year ago. He had never consulted a physician, but I ascertained that for a year he had had gradually increasing attacks of dyspnoea.

I wish to enter a protest here against the diagnosis of "acute indigestion" as a cause of sudden death. If it perfectly true that symptoms of acute indigestion frequently precede death, and no doubt distension of the stomach may by upward pressure embarrass the heart action just beyond the point that organ is capable of enduring an added strain. Furthermore, the heightened

blood pressure following a full meal may be just the necessary increase for a ruptured middle cerebral artery, or furnish just that resistance necessary to cause acute cardiac dilatation, but there is no evidence that acute indigestion, per se, is capable of causing immediate dissolution.

As illustrative of the conditions, just recounted, which may bring about sudden death, permit me to briefly give histories of three cases which have come under my personal observation.

The first case was that of a Sweede, a blacksmith by occupation, about forty years of age. He complained of pain in his head which none of his doctors had been able to relieve, and of vomiting, unassociated with nausea, and rather projectile in character. He came into the hospital on a Saturday, and after subjecting him to a careful physical examination, nothing of any importance was ascertained. He was a strong, powerful man, in apparently perfect health. The only suggestive feature was the history, somewhat indicative of brain tumor. The next day being Sunday, and there being no apparent reason for haste, examination of the eye grounds, and other special examinations were deferred until Monday. On Monday morning, while I was in the ward, one of the nurses came hurriedly up, and told me she could get no response from the patient. I immediately went to his bed, and found him lying with his head on his arm, in the position of one asleep. He was stone dead. He was known to have been alive a very few minutes previously. He had died without the semblance of a struggle. At autopsy a small cyst was found on the inferior surface of the cerebellum, which must have suddenly pressed upon the respiratory center lying underneath. Certainly diagnosis of this condition would have been next to impossible during life.

The second case was that of a gentleman aged about sixty-five, who for forty years had been a great sufferer from bronchial asthma. When he came under my care he was having frequent paroxysms, especially at night, with most extreme dyspnoea. The action of the heart was very feeble, and the usual signs of weakness of the heart muscle were present. After an attack of unusual severity, he lay down upon the bed and fell asleep. The members of the family, fearing to awaken him, stole from the room. Finally, one, more solicitous than the rest, crept close to him, and was shocked to discover that he had quietly died without the slightest warning. No autopsy was made, but all the symptoms and signs pointed to acute cardiac dilatation, following a chronic cardiopathy associated with or resulting from the long continued asthma.

The third case was that of a physician from south Georgia who came to me December, 1910, complaining of cough and shortness of breath. He had had a severe attack of scarlet fever nine years previously, since which time he had never been strong. He dated his illness, however, from about one year before coming to me. His principal complaints were severe paroxysms of cough, a feeling of great oppression in the chest and abdomen, associated with severe attacks of nocturnal dyspnoea, constant shortness of breath on exertion, and a tendency to flatulence. He had transient edema of the extremities, present in the evening, absent after sufficient rest in the recumbent posture. He was a very large, heavy man, weighing well over two hundred pounds. On examination his lungs were negative, but the heart presented interesting signs. The point of maximum impulse had disappeared, and was replaced by a diffuse, wavy, heaving impulse extending over a considerable area. The cardiac area on percussion was distinctly enlarged. On auscultation the first and second sounds approached each other in character, particularly in pitch and duration, though there was not marked feebility of rhythm. The second sound was reduplicated at the base of the heart. No definite murmurs were present. The heart was beating at the rate of 100 to 108 per minute, and very irregular in force. Despite the opinion of Dr. Richard C. Cabot, of Boston, who doubts the correctness of any diagnosis of myocardial disease, I felt justified in believing that there was marked weakness of the heart muscle from the physical signs. The abdomen was soft and flabby. The liver was easily felt extending three inches below the costal margin in the mamillary line, and quite tender on palpation. The urine was reddish yellow in color, possessed a specific gravity of 1020, and showed a large amount of albumin and many hyaline and granular casts.

With such findings it is difficult to determine the initial lesion, whether in heart or kidney. The term nephro-cardiopathy covers the situation. This patient improved somewhat under rest and medicinal treatment. But it was only temporary. Some two months after I first saw him, he died suddenly while seated with his family around his fireside.

Conclusions.

1. The conditions which predispose to sudden death are easily classified. Many of these conditions are readily diagnosed, others are very difficult, or even impossible to recognize. Of great importance is the recognition of weakness of the heart muscle.

2. It is a matter of very great importance to recognize the danger of sudden death. Life may be prolonged, or in the case of the temporary heart weakness following acute infections, the danger, which is very real, may be entirely averted.

3. Careful and accurate diagnosis should be striven for, and earnest warning of the danger given to the patient or to those in charge of him.

1314-15 Empire Building.

Eugenics and Conservation.*

By Dr. Fletcher Reese Harris, Henderson, N. C.

In the words of Sir Francis Galton, "Eugenics is the study of the agencies under social control, that may improve or impair the racial qualities of future generations, either physically or mentally."

For centuries our leaders in thought have considered the possibility of improving the innate characteristics of the human race. This has been through a more or less haphazard way—rather speculatively—owing to a lack of data—but today, with the statistics at hand, it may be treated scientifically.

I shall endeavor to show that the race is deteriorating—and that the time is already approaching when we must take an inventory and "about face"—or go down in the racial struggle as so many nations have done before us.

We must not delude ourselves with the false belief that because we are Americans, Anglo-Saxons, therefore we are and will remain a great and dominant people. As scientific men it behooves us to study the facts as they are—not see them through some racial glamour—but, I repeat, see the facts as they are, and, having seen, let us take advantage of every known and knowable method of race-improvement until we become a race of surpassing vigor.

The aim of Eugenics is the production of a more healthy, more vigorous humanity. Again in the words of Galton, "The aim of Eugenics is to represent each class * * * by its best specimens. * * * To bring as many influences as can be reasonably employed to cause the useful classes in the community to contribute more than their present proportion to the next generation and to cause the useless, vicious classes to contribute to the next generation less than their present proportion." It is common knowledge that we can and do create new and better types of plants and animals.

The time is here when we may give an order to a specialist specifying that we would

*Read before North Carolina Medical Society, June 18, 1912.

like to have a plant or an animal embodying certain characteristics, and, after due lapse of time, the order is filled, just as though we were dealing with a tailor for a suit of clothes.

Admitting that this is true, the question that concerns us is: Whether this knowledge may be applied to the human race?

In answering this problem, we will take some of the most important specific questions to which workers in Eugenics have obtained definite answers.

1st. Are the physical characteristics of man inherited, and, if so, with what intensity in the different degrees of relationship? To answer this question it is necessary to measure precisely in a large number of individuals of certain degrees of relationship a series of definite physical characteristics, and then to get an expression of the degree to which a given characteristic in sons, say, is like that characteristic in fathers.

The best expression for this likeness has been found to be a mathematical constant, known as the Coefficient of Correlation. To explain this Constant: It is of such character that if every son in a measured group were precisely like his father in respect to the characteristic measured, the Coefficient measuring the resemblance would take the value one. If, on the other hand, the group of sons were no more like their fathers than they were like any group of men in general, the Coefficient would take the value of zero. For degrees of resemblance between total absence of likeness and absolute identity, the Coefficient will take the appropriate value between zero and one.

To answer the question whether physical characteristics are inherited in man, Prof. Pearson collected an extensive series of data.

The data included measurements of stature, and length of the forearm and span in about 1,000 families, for the following relations: Father, mother, adult sons, adult daughters. The general character of the results of the analysis of these is as follows:

Character	Relatives	Intensity of Resemblance as measured by the Coefficient of Correlation.
Stature	Father and Son	.51
Span	Father and Son	.45
Forearm Length	Father and Son	.42
Stature	Mother and Daughter	.51
Span	Mother and Daughter	.45
Forearm Length	Mother and Daughter	.42

From these results there can be but one conclusion. It is that the characteristics measured are definitely inherited and to a sensible degree. The resemblance between parent and offspring is on the average about one-half as close as complete identity.

The average of the intensities of parental resemblance in the above table is .47.

The average intensity of the resemblance between brothers, from a similar table, is .53—larger than the former.

This leads to one of the well-grounded conclusions of Eugenics' work—that the hereditary resemblance between brothers and sisters is, on the average, closer than that between parent and offspring.

In a similar way the hereditary resemblance between an individual and his remote ancestors, in respect to physical characteristics, has been measured.

Having settled the question that the physical characteristics of men are inherited, the next problem obviously is: Are mental and moral qualities likewise inherited, and, if so, with what degree of intensity? Without going into details, the general results may be stated as follows: The Coefficients measuring the resemblance between brothers and sisters, in respect to eight psychical characteristics studied, were found to take values substantially identical with those found for the Coefficients measuring the resemblance between the same individuals in regard to a series of physical characteristics. In other words, the evidence indicates that mental and moral qualities are inherited, and with about the same degree of intensity as physical characteristics.

Another investigator has shown from a study of Oxford class-lists that the degree of resemblance between father and son and between adult brothers, in intellectual ability as measured by University Scholarship, is substantially the same as the resemblance in physical characteristics between such relatives.

Are specific diseases and pathological conditions generally inherited, and with what intensity? Workers in Eugenics find that some pathological conditions, at least, are inherited, and with about the same intensity as physical, mental and moral characteristics are.

I shall not take your time, in this presence, to indicate these pathological conditions, but take it for granted that you know.

Having shown that human characteristics are inherited—both good and bad and also liability to disease—it is pertinent to know what are the existing conditions relative to the fertility of desirable as compared with undesirable classes. The results are shown by Prof. Pearson in a lecture before Oxford University in a condensed table as follows:

Class	No. of Children per Family
Deaf-mutes, England.....	6.2
Deaf-mutes, America.....	6.1

Tuberculous Stock.....	5.7
Albinotic Stock.....	5.9
Insane Stock.....	6.0
Edinburgh Degenerates.....	6.1
London mentally defective....	7.0
Manchester mentally defective	6.3
Criminals.....	6.6

FERTILITY IN NORMAL STOCKS.

English Middle Class.....	6.4
English Intellectual Class....	4.7
American Graduates (Harvard)	2.0
English Intellectuals.....	1.5

The ratio of prisoners to the total population in the United States has increased from 29 per 100,000 in 1850 to 125 per 100,000 in 1904.

In the United States the number of murders and homicides per million of the entire population has nearly trebled in the last fifteen years.

In the United States in 1880 there were 183 insane persons per 100,000, while in 1903 there were 225 insane persons per 100,000.

The Superintendent of the Ohio Institution for the Feeble Minded wrote in 1902: "Unless preventive measures against the progressive increase of the defective classes are adopted, such a calamity as the gradual eclipse, slow decay and final disintegration of our present form of society and government is not only possible, but probable."

The latest census reports for the United States show as follows: Insane and feeble minded, blind, deaf, and deaf and dumb, paupers in institutions, prisoners, juvenile delinquents, etc., a rough total of nearly 3,000,900.

It is always the same story—rapid increase of the unfit, defective, insane, criminal; slow increase, even decrease, of the fit, normal or gifted stock.

It is with such conditions in mind that Whetham writes: "Although this suppression of the best blood of the country is a new disease in modern Europe, it is an old story in the history of nations and has been the prelude to the ruin of States and the decline and fall of empires."

With this appalling condition obtaining in this land of ours, it is incumbent upon us as scientific men and intelligent citizens to pause and consider what measures we shall adopt to correct it. I suggest that the chief *positive* methods of race-regeneration be educative rather than legislative. Give the facts the widest possible publicity in every available way.

In 1910 the Eugenics Record office was instituted at Cold Spring Harbor, Long Island, N. Y. The American Breeders Association has appointed a Committee and Sub-committees under highly competent leaders for the collection of exact data of human heredity upon a large scale. We

should encourage these institutions by sending pedigrees of families, both good and bad.

The scope of our census reports should be broadened as a means of securing data on human blood-lines and tracing the descent of defects.

We should educate the young for parenthood. There are many more positive methods that might be suggested, but I leave the responsibility on you to help suggest them.

Legislative and negative methods—segregation or *permanent care* of the feeble minded under proper medical supervision.

Notification of venereal diseases. Why should we be required to notify the public of small pox—both a preventable and curable disease—and not notify, by legal enactment, syphilis, a disease that affects future generations?

An authority has tersely said, "If only one-half of one per cent. of the thirty million dollars annually spent on hospitals, twenty millions on insane asylums, twenty millions for alms-houses, thirteen millions on prisons and five millions on the feeble minded, deaf and blind, were spent on the study of the bad germ plasma that makes necessary the annual expenditure of nearly one hundred millions in the care of its produce, we might hope to learn just how it is being reproduced and the best way to diminish its further spread."

This is what I regard the crux of the situation. Stop the *sources* instead of using all out means in alleviating the conditions.

Another suggestion is to obliterate the double standard by legal enactment.

Vasectomy with careful restrictions—For the last four years (since March, 1907,) the laws of Indiana have permitted the performance of the operation of Vasectomy upon "confirmed criminals, idiots, rapists and imbeciles" after rigid scrutiny of all the mental and physical conditions of the individual case and upon the concurrent judgment of three competent and impartial persons. The title and significant parts of the text of this law are as follows:

AN ACT, entitled, An Act to prevent procreation of confirmed criminals, idiots, imbeciles and rapists providing that superintendents, or boards of managers, of institutions where such persons are confined shall have the authority and are empowered to appoint a committee of experts, consisting of two physicians, to examine into the mental condition of such inmates.

WHEREAS, Heredity plays a most important part in the transmission of crime, idiocy and imbecility;

Therefore, Be it enacted by the General Assembly of the State of Indiana, that on

and after the passage of this Act it shall be compulsory for each and every institution in the State, entrusted with the care of confirmed criminals, idiots, rapists and imbeciles, to appoint upon its staff, in addition to the regular institutional physician, two skilled surgeons of recognized ability, whose duty it shall be, in conjunction with the chief physician of the institution, to examine the mental and physical condition of such inmates as are recommended by the institutional physician and board of managers: If, in the judgment of this committee of experts and the board of managers, procreation is inadvisable, and there is no probability of the improvement of the mental and physical condition of the inmate, it shall be lawful for the surgeons to perform such operation for the prevention of procreation as shall be decided safest and most effective.

But this operation shall not be performed except in cases that have been pronounced unimprovable. Provided, that in no case shall the consultation fee be more than three dollars to each expert, to be paid out of the funds appropriated for the maintenance of such institution.

In Indiana nearly a thousand persons have been successfully treated, many upon their own request. Laws similar to this have been passed in Oregon, Connecticut and other States.

The Connecticut statute, enacted in August, 1909, is as follows:

"AN ACT, concerning operations for the prevention of Procreation:—Be it enacted by the Senate and House of Representatives in General Assembly Convened:

SECTION 1. The directors of the State prison and the superintendents of State hospitals for the insane at Middletown and Norwich are hereby authorized and directed to appoint for each of said institutions, respectively, two skilled surgeons, who, in conjunction with the physician or surgeon in charge at each of said institutions, shall examine such persons as are reported to them by the warden, superintendent, or the physician or surgeon in charge, to be persons by whom procreation would be inadvisable.

Such board shall examine the physical and mental condition of such persons, and their record and family history so far as the same can be ascertained, and, if in the judgment of a majority of said board, procreation by any such would produce children with an inherited tendency to crime, insanity, feeble-mindedness, idiocy or imbecility, and there is no probability that the condition of any such person so examined will improve to such an extent as to render procreation by such person advis-

able, or if the physical and mental condition of any such person will be substantially improved thereby, then the said board shall appoint one of its members to perform the operation of Vasectomy or Oophorectomy, as the case may be, upon such person. Such operation shall be performed in a safe and humane manner, and the board making such examination, and the surgeon performing such operation, shall receive from the State such compensation, for services rendered, as the warden of the State prison or the superintendent of either of the State hospitals shall deem reasonable.

SECTION 2. Except as authorized by this Act, every person who shall perform, encourage, assist in, or otherwise promote the performance of either of the operations described in Section 1 of this Act, for the purpose of destroying the power to procreate the human species; or any person who shall knowingly permit either of such operations to be performed upon such person—unless the same be a medical necessity—shall be fined not more than \$1,000.00 or imprisoned in the State prison not more than five years, or both."

Some one has so well said, "Could such a law be enforced in the whole United States, less than four generations would eliminate nine-tenths of the crime, insanity and sickness of the present generation in our land. Asylums, prisons and hospitals would decrease, and the problems of the unemployed, the indigent old, and the hopelessly degenerate would cease to trouble civilization."

Many countries, from Servia to Argentine Republic, have statutes forbidding the marriage of the insane, idiots, deaf and dumb, certain classes of criminals and persons affected with certain contagious diseases.

"The first and main point is to secure the general intellectual acceptance of Eugenics as a hopeful and most important study. Then let its principals work into the heart of the nation, who will gradually give practical effect to them in ways that we may not wholly foresee.

And Whethem adds: "Hitherto the development of our race has been unconscious, and we have been allowed no responsibility for its right course. Now, in the fullness of time * * * we are treated as children no more, and the conscious fashioning of the human race is given into our hands. Let us put away childish things, stand up with open eyes, and face our responsibilities."

I intended to refer to prospective immigrants, but I will spare you.

We have spent our millions upon the conditions of life—why not pursue the rational course and spend something on life itself?

I have not a word to say against anything and everything to ameliorate the conditions of weak and suffering humanity, but I do plead that we use the knowledge we have and reproduce the best from the best, and, in so far as we can, curtail the reproduction of the criminal, the insane, the idiot, the imbecile and all degenerate classes. And may it be said of us, "And they that shall be of Thee shall build the old waste places; Thou shalt raise up the foundations of many generations; and Thou shalt be called the Repairer of the breach, the Restorer of paths to dwell in."

For these ends may Science and Common Sense join hands over the cradle of the unborn!

Strangulated Hernia in Infants; Report of Case with Operation.*

By H. McKee Tucker, M.D., Raleigh, N. C.,
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I shall not attempt to go into details of strangulated hernia, for little can be said that is at variance with that which has been so fully written on strangulated hernia in the adult. However, there are a few things that are of interest.

Frequency.—Strangulated hernia of infants is comparatively rare, in fact very rare.

Estor, after searching the records of nine large European clinics, found not a case. Out of two hundred and twenty-five of his collected cases from various sources, over half of these occurred during the first six months of life. He estimates the relative frequency of strangulated hernia in infants to adults as: 1 to 62, while Frickhoffer estimates the frequency as: 1 to 107. Broca, of Paris, out of 950 operations on children, found of these only nine cases of strangulated hernia.

Cause of Strangulation.—The majority of writers claim that the usual cause is a constriction of the neck of the sac, others that it is usually due to the tight constriction of the external ring. The case I operated on was due to a constriction in the sac.

Diagnosis.—Under the head of diagnosis, let me emphasize the importance of always thinking of strangulated hernia in the vomiting of infants, for there are cases where no hernia was present prior to the attack of strangulation. Don't take the statement of the mother that no rupture exists, especially if the child has a rapid pulse, if shock is

present and if constipation exists. Its early recognition is most important.

As regards the differential diagnosis, there is one condition that is sometimes mistaken for strangulated hernia in infants, namely: hydrocele of the cord. The temperature, the absence of vomiting, the absence of constipation, etc., and the fact that hydrocele of the cord in infants soon disappears with the proper treatment, make it so a mistake in diagnosis should not occur. However, the tenseness of the sac, the statement of the mother that the enlargement appeared suddenly, (the truth being that she had not observed it before), the sac apparently being followed into the abdominal cavity and the inability to reduce it, have been the cause of mistaking hydrocele of the cord for strangulated hernia in infants.

Prognosis.—Wm. B. Coly claims that the mortality from operations in strangulated hernia of infants is lower than that of adults, and much lower than that of the aged.

As in the adult, the prognosis depends upon how long strangulation has existed, the degree of resistance of the patient, and the tightness of the constriction.

A very frequent cause of death is the drowning of the infant in his or her own fecal vomit, as it comes out of the anaesthetic.

No one should ever operate for this condition without first washing out the infant's stomach.

Symptoms.—There is little to be said here as regards the difference between infants and adults. Here you depend entirely upon the objective symptoms.

Treatment.—Always operate as soon as possible. Certainly always at once relieve the constriction, employing free gastric lavage at the beginning.

Stromyrs' dictum was: "If called to a case of strangulated hernia in the day time, the sun should not be allowed to set, if called in the night, the sun should not be allowed to rise, before the strangulation has been relieved." I wish to add that not only should he not allow the sun to rise or set before it is relieved, but that it be done as many hours before it rises or sets as possible. Every minute counts for much. There are some doctors who hesitate to perform a radical operation for hernia, but it is his duty, if he cannot secure surgical aid at once, to at least make an incision immediately and relieve the constriction. A radical operation being performed later.

The following is the history of a case I operated on:

Male, age 15 months, cried a great deal for the first three months of his life. Parents said they could see the intestines through

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the thin layer at the umbilicus. They applied a 50-cent piece over the navel and in a short time the condition was cured.

History of Attack.—He had eaten peanuts Saturday morning, also shelled corn about 6 p. m. and vomited eighteen grains of corn.

Dr. Ottis Ray, who referred the case to me, called the following morning. Enema was given and washed out a quantity of peanuts. He advised operation at once to relieve the strangulation of an inguinal hernia. Operation was refused until Wednesday night, when the infant was brought to Rex Hospital and operated upon Thursday morning at 3 o'clock.

The findings were that the constriction was in the sac, that a piece of intestine was strangulated, that the strangulation had caused a gangrenous spot the size of a quarter, and that this was perforated.

The gangrenous spot was excised, the rent closed with fine silk sutures, the gut returned, and radical operation performed. A very small cigarette drain was inserted into the scrotum. The vomiting which had continued from the beginning ceased and there was no vomiting from then on.

There was a profuse purulent discharge to follow from the scrotal opening; thus pus burrowed up and infected the skin wound, but did not involve the underlying layers. The stitches were removed in the skin and in eight days he was carried home. Dr. Ray reported that the skin wound granulated rapidly and there was no return of the hernia two months after operation.

A Menstrual Psychosis Mistaken for Drunkenness.

By David I. Macht, M.D., Baltimore, Md., Assistant in Medicine, Johns Hopkins University, and Coroner, Baltimore City.

The relation of the female generative organs to pathological conditions of the nervous system is well known. No other viscera than the genitalia exert through their physiological activity such a powerful influence on both the psyche and the lower nervous mechanism; and this holds true of all the phases of a woman's life, puberty and menarche, pregnancy, puerperium and menopause. Thus Barker points out the intimate relation between the female sexual life and neurasthenia, and that interesting and curious group of symptoms spoken of as Psychasthenia.(1) We are all familiar with the nervous and psychic disturbances occurring at the time of menopause. Anton in Veit's Handbuch(2) makes an extensive discussion of the relation of pregnancy and puerperium to various mental states, puerperal insanities, etc. These latter conditions are not at all uncommon.

The relation of *menstruation* to *acute* psychical disturbances is not so familiar. No less an authority than Kraft-Ebbing is responsible for the statement that "Vollkommen unbeeinflusst bleibt das Seelenleben des Weibes während der Menstruation wohl nie." "The mental sphere of woman is never entirely unaffected during the menstrual state.(3) Usually, however, the effect is manifested in a more or less marked depression of spirits, sometimes by hypochondriacal states. Occasionally there are mental aberrations of a periodic type which Schauta terms "*Menstrual-Psychose*."(4) It is very rarely that an *acute maniacal* condition directly related to disturbances of the menstrual function is met with. I have recently been fortunate enough to meet with such a case, which is of interest not only from the medical and gynecological, but also from the medico-legal, point of view, and I wish to report it in brief.

On August 3rd, I happened to stop in at the Northwestern Police Station on some medico-legal business, when the Lieutenant in charge told me he had an interesting prisoner with whom he knew not what to do. It was a "crazy" girl he said who was brought in there, and whom he wanted to send to a Hospital, but the Hospital refused to admit her. The girl was arrested by a patrolman, on the charge of disorderly conduct and being drunk. I expressed a desire to see the prisoner. On going back to her cell, the matron, who is an exceptionally intelligent and kind hearted woman, told me, on the side, that she did not find the girl drunk, and that the prisoner was suffering from painful menstruation. I found the prisoner in a highly excited state of mind, raving and carrying on in a way which easily explained why she was taken for drunken by the policeman and arrested. I ordered her to be taken out and gave her a hypodermic of morphine and atropine which very soon quieted her. I then prescribed her large doses of bromide and had her sent home. The medication benefited her greatly.

On investigating the case and examining the patient, I learned that she began to have her periods at an early age—10 years—and that she has since then had periodic attacks of violence associated with dysmenorrhoea. For the last few years the attacks have been worse. On physical examination, the lungs and heart and abdominal viscera were normal; there was quite a marked secondary anæmia. Pelvic examination was not made.

We have here, therefore, a periodic maniacal state of mind associated with dysmenorrhoea. The case emphasizes the importance of proper care of patients suf-

fering with menstrual disorder. In the words of Robinson(5) "menstruation is a complicated process; what is superficially known as menstruation is perhaps only a part of a comprehensive physiological mechanism. We have here a chain of symptoms in which now one, then another, line is put in tension." Therefore we must take care and ease the strain.

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Pellagra.

By Stephen F. Hale, M. D., Mobile, Alabama.

A study of pellagra (Lombardy Leprosy, Maidismus, Psychoneurosis maidica, Alpine scurvy, mal de la rosa, and a variety of other names) is timely and not out of place for an intelligent understanding of a disease new to the United States and to which we are all liable. The present article does not purport to describe in detail this most interesting and terrible disease, nor to relate fully its history. It will merely present briefly the essential points of a disease now prominently before the public mind, and which is in many ways an unanswerable puzzle to the medical profession.

The first case of pellagra of which we have any record (the discovery of pellagra naturally being uncertain) was at Oviedo, Spain, and was reported to the French ambassador at Madrid, one hundred and seventy four years ago. (Indian corn came to Spain first in 1700, and from Mexico. This date and the date of the report of the first case when considered together are significant. As the use of corn spread, so spread pellagra.) Gaspar Casal of Oviedo a small town in the Asturias is, almost universally, given the credit for the first description of the disease. He regarded it as "a peculiar kind of disease consisting of a combination of scurvy and leprosy," which if pathologically incorrect, nevertheless was quite a characteristic description, and an easy fallacy for the times. It was then entitled mal de la rosa from its characteristic erythema.

Antonio Pujati, a celebrated Venetian physician, independently described a similar disease about 1755 in the district of Fetre in northern Italy, giving it the name of Alpine Scurvy. F. Proppoli, of Milan,

in 1771 described a disease of identical symptoms to which he gave the now current name "Pelagra" (spelling it with one "l"), which name was already in common usage by the people generally. Pellagra is derived from two Italian words: pelle, skin, and agra, rough.

Joseph the Second of Austria in 1784 founded the first pelagrosario, or hospital for pellagrins, at Leguanno, which was placed in charge of Gaepaus Strambio who compiled, while there, many of his observations of the disease.

At the end of the eighteenth century the disease was quite common over northern Italy, and was severe in character and of a high mortality rate. It was not known in France until the 19th century. It was there given the name of *maladie de la Teste*, because of first being observed nearby *Teste-de-Buch*. It was first observed in Roumania in 1858, in Egypt in 1847 and later in various parts of Southern Europe and the Mediterranean littoral.

The first cases observed in the United States were sporadic and were reported in 1864. A case was reported in 1883, an Italian sailor, and also one in 1902 in Brooklyn, N. Y. A case was reported in New Orleans, another in Atlanta, and another in North Carolina in 1902. In 1906 an epidemic of the disease occurred at Mount Vernon, Alabama, at the State Negro Insane Asylum there. Due credit for careful study of these cases belongs to Drs. Searcy, McCafferty, Boudurant and Dwyer; the labors of the former two are especially deserving of a full meed of credit. This same year Dr. Babcock of the State Insane Asylum of South Carolina independently diagnosed the disease. Other cases shortly afterwards were reported by various observers in different sections. Drs. Watson and Babcock in 1908 independently identified the disease with Italian Pellagra.

How long pellagra has existed in the United States is unknown. Whether or not the disease is but recently with us is truly conjectural. Very probably it has been always with us, but only just lately recognized (being diagnosed as a symptom-complex of some other disorder), and the reason it has not been noted here sooner is probably due to the fact as seems also true as to appendicitis and uncinariasis, that it may hitherto have occurred only sporadically (else it is almost certain that the disease would have been recognized sooner), and also, possibly, because corn is now largely handled differently than it formerly was.

"The recognition and development of pellagra in the United States bears a marked similarity to the history of the recogui-

tion and development of the disease in northern Italy in the eighteenth century. In both countries pellagra seems to appear with almost startling suddenness, apparently spread with great rapidity and was characterized by a marked intensity and high mortality." (Lavinder).

The real geographic distribution of pellagra is not known. In Egypt probably, the greatest number of cases are to be found. It is a very common disease among the poor of Italy, where are to be found a score or more of hospitals for the disease. The disease at this time is most prevalent in northern and central Italy, in parts of Austria-Hungary, Roumania and the United States. It is of wide distribution, and is almost exclusively in the tropical and sub-tropical zones.

The true source of this disease is as yet unknown, notwithstanding many plausible hypotheses and statements to the contrary. Whether or not the menace is really from the maize, as seems to be the consensus of competent opinion, is open to serious conjecture and strong doubt, though this theory has much to logically warrant belief as to its correctness. While its etiology is unknown, yet the majority of observers almost unanimously agree that it is a food toxemia analagous to ergotism or beri beri. (A disease of similar symptoms has been produced experimentally in animals, notably in chickens, by feeding them the products of partially decomposed or mouldy Indian corn, known botanically as *Zea Mais*.) The belief of corn as the causal agent originated with Casal, who first described the disease, and has always occupied a dominant position as the presumed etiological factor of the disease. The fungus in the corn, said to be responsible for the disease, is known as *Aspergillus Fumigatus*; however, there are three theories as to the agent in the corn producing the disease, one that it is due to fungi, another that it is due to some chemical principle, probably of the ptomaine order, and third that it is microbic. The disease has also been attributed to the eating of spoiled wheat and rice. Belief in corn as an etiological factor rests mainly upon the following significant facts. It occurred first in Europe after the introduction of corn, and followed closely its cultivation and adoption as a food. It is rarely found in countries where maize is not a common food stuff. It is improved, diminished, or disappears in those from whose diet corn is eliminated, as it is more apt to appear in those in whom a maize diet becomes a prominent article of food, and the severity of the disease increases when a corn diet is allowed.

Sambon believes the disease to be distrib-

uted by Simulidae, and Alessandrini advances the idea that it is a parasitic disease due to a water bourne nematode worm, and Siler and Nichols attribute it to amebiasis. The ideas as to the etiological factors are thus widely at variance.

It is as before stated, a disease of warmer climates, occurs at all ages, but is most frequent between 20 and 40 years, in the United States more frequent among females, and in the South, among the female negroes; in Italy more frequent among the farm laborers, as it is with the rural population generally in the other countries of Europe, (not the rule in the United States where it is about equally distributed between the rural and urban population). Alcoholism, previous illness, bad hygiene, pregnancy and lactation are predisposing factors. "It is no respecter of class, sex, age or race."

Its pathology is varied and inconstant. There seems "a strong analogy between pellagra and ergotism, both etilogically and pathologically." Very briefly: the pathology consists of irritations, exudations, hyperemias, atrophy, fatty degeneration, pigmentary degeneration, calcarious degeneration, variously situated. There may be precocious sensility with atheroma, amylaceous bodies in the spinal cord and ganglia, precocious baldness, sclerosis and pigmentation.

It has been defined "as an endemic, trophic disease, of toxic origin with vernal manifestations and characterized by gastrointestinal and cutaneous lesions and mental exacerbations."

It is a disease of many symptoms and varied types. We have a gastro intestinal type, a nervous or mental type, a cutaneous type and a typhoid type (depending upon a preponderance of symptoms), but these types are best regarded as complications, the best classification probably being *acute* and *chronic*.

Stomatitis, diarrhea, constipation, anemia, headache, neck-pain, gastralgia, indigestion, nausea, malaise, anorexia, apathy, neglect of duties, nervousness, neurasthenia, loss of memory, delirium, hallucination, insanity, melancholia, slow action, vertigo, stupor, slow and dragging gait, irritability, cutaneous eruptions (more or less severe) oedema of the feet, pus infection of face, ears and finger tips, bronchitis, pneumonia, tuberculosis, tetanic attacks, paralysis of bladder, dysphagia, obstinate vomiting, refusal of food, high temperature (denoting infection and complication, otherwise a rare, and generally a late, manifestation), tremors and contractures are all complications to be noted in this disease.

It is a malady of slow onset. One feels

at first merely run down. The prodromal period is considered about a year, though some cases are of quite sudden onset. Later the symptoms are those affecting the digestive organs, those affecting the skin, and those affecting the brain. The superficial layer of mucous membrane covering the tongue may be shed. The skin lesions at first resemble sunburn, later somewhat like those in leprosy. The nervous symptoms are the worst symptoms of the disease. It deteriorates the mental powers rather late and in such a degree as to be considered by some as a form of insanity (from four to ten per cent. of pellagrins become insane). It produces, as a rule, a kind of melancholia, but may induce mania. There are sometimes homicidal outbursts. Recently many of the inmates of a Georgia Insane Asylum have been found to have pellagra.

The disease is said to be non-contagious. It is more severe during February, March and April.

The stools of the pellagrin have a very characteristic odor.

Cases are of about five years continuance, although some lasting much longer have been reported. The death rate from pellagra is very high—25 to 65% are variously estimated, statistics being insufficient and unreliable. The death rate in the United States is probably diminishing. The treatment of pellagra is unsatisfactory and empirical. It is best treated symptomatically. Arsenic (in various forms and in several ways), hexamethylenetetramine, blood transfusion, and various other measures and methods have been tried and lauded, but all of them seem of little, if any, value in the treatment of this disease. "—reports from institutions treating pellagra show 598 patients treated, and out of this number 226 have died, leaving 372 unaccounted for"—(J. G. Wilkinson).

Cold climate seems the best special treatment now known. Colorado and Mont-eagle, Tennessee, are said to have produced favorable results, bringing about symptomatic relief.

The problem is a grave one. The disease is insidious and dreadful. Preventative and curative means are demanded. The health, happiness, prosperity and life of the Nation may at any time be threatened by this horrible malady of mystery, and, as things now are, thousands are suffering terribly, bodily and mentally, from this scourge. May the world at some early date see it thoroughly understood and conquered, and important only historically.

The Prognostic Value of Indicanuria and the Solid Content of the Twenty-Four Hours Urine in Pulmonary Tuberculosis.

By John Roy Williams, M.D., Hendersonville, North Carolina.

In the early part of this year I had occasion to observe 91 cases of pulmonary tuberculosis at the Michigan State Sanatorium, at which time I endeavored to investigate the prognostic value of indicanuria and the solid content of the twenty-four hours urine. I believe these observations not only give information as to prognosis, but also as to the prevention of tuberculosis. I do not infer that the opinions I have gathered from these observations are new, but they seem to be a confirmation of former opinions of long standing.

Indicanuria is generally accepted as being due to intestinal putrefaction, principally of proteid materials, producing, as one of the end products, indol, which becoming absorbed, is eliminated by the kidneys, giving the indican reaction. Obermayer's test is the one I used in my work. The reagent is a solution of ferric chloride, two parts per thousand, in chemically pure hydrochloric acid. Chloroform is used as a solvent for the indican. Obermayer's reagent converts, by a process of oxidation, the indol into indigo-blue, producing a blue color, the intensity of which depends upon the amount of indol present.

Indicanuria is thought to be undesirable, be it present in tuberculosis or otherwise. It means there is, first, intestinal fermentation and putrefaction, always associated with which we find intestinal indigestion; secondly, impaired nutrition; thirdly, indol is believed to be of a toxic character, unfavorably influencing all of the organs and tissues of the body; fourthly, it means more work for the kidneys, which are already overworked in tuberculosis. So, for these reasons, indicanuria may seem to favorably influence a more rapid progress of the tubercular process, as well as being a predisposing cause of the disease.

Using the Turbin Scale, of the 91 cases observed 25 were incipient, 42 were moderately advanced, and 24 were far advanced. Indicanuria was present in 68 per cent. of the incipient, 57 per cent. of the moderately advanced, and 58 per cent. of the far advanced cases. It was present in 60 per cent. of all the cases. This seems, and is, a high per cent., but when we consider that the diet of the patients there is largely of a proteid character, it may not be considered so high after all. In spite of my best efforts to overcome it, the indicanuria persisted in a majority of the cases, doubtless due to the continued high proteid diet. So,

if indicanuria is an undesirable complication in tuberculosis, it may seem that a diet rich in proteids is not a good one for the tuberculous, and possibly we should depend more on carbohydrates and hydrocarbons.

Of the 25 incipient cases, 20 showed improvement while under observation. Fourteen of the improved cases showed indicanuria in varying degrees, while six did not. Four incipient cases showed no change while under observation, two of which gave an indicanuria, the other two did not. One incipient case lost ground, giving a marked indicanuria.

There were 20 incipient cases showing improvement, or 80 per cent., of which 70 per cent. gave indicanuria; while of those incipient cases which either remained stationary or lost ground, only 60 per cent. gave the reaction. This would seem to indicate that an indicanuria was favorable, having an advantage of 10 per cent. But, it should be remembered that there were only five cases which did not improve, which leaves the right of assumption that there were not enough non-improved cases to make a fair comparison.

It is interesting to note that the improved incipient cases giving indicanuria averaged 691 grains of solids in the 24 hours urine; while those which failed to improve averaged but 375 grains of solids. It is therefore reasonable to assume that the apparent per cent. in favor of indicanuria is not one in fact, but may be due to a better elimination of the solids by the kidneys, which should offset, if not more than do so, the seeming advantage of the indicanuria.

This latter point seems well borne out by the observation of two incipient cases which improved, both of which gave indicanuria. One, which improved very slowly, eliminated but 524 grains of solids in 24 hours; the other, which made rapid improvement, eliminated 1980 grains. While a similar marked difference was not noticeable in all of the improved and non-improved cases, yet my observations seemed to show that with indicanuria and a high solid elimination, the prognosis was more favorable than with indicanuria and a low solid elimination.

There were 42 moderately advanced cases, eighteen of which showed improvement while under observation. Of these, nine gave indicanuria with an average of 680 grains of solids; while nine did not give indicanuria, with an average of 430 grains of solids. This again seems to indicate that those cases with a higher solid elimination and giving indicanuria, may improve; and that the prognostic value of indicanuria is more or less dependent upon the solid elimination.

There were 16 moderately advanced cases which showed no improvement while under observation. Of these, 11 gave indicanuria with an average of 471 grains of solids; five did not give indicanuria, with an average of only 301 grains.

There were eight moderately advanced cases which lost ground while under observation, four of which gave indicanuria with an average of 336 grains of solids; the other four not giving indicanuria with an average of only 270 grains. So, it may be said of the moderately advanced cases which either remained stationary or lost ground while under observation, irrespective of the presence or absence of indicanuria, the solid elimination was low. Yet in those moderately advanced cases which improved, irrespective of the indicanuria, the solid elimination was relatively high.

There were 24 far advanced cases, three of which improved while under observation. Of these three improved cases, one gave indicanuria with 956 grains of solids; while the other two, not giving indicanuria, the solid elimination was 744 grains. This seems to indicate that in the far advanced cases a high solid elimination, irrespective of indicanuria, is more favorable to improvement, for of the remaining 21 far advanced cases, which either showed no improvement, lost ground or died, all gave a low solid elimination as will be later pointed out. Yet the three far advanced cases which improved all showed a high solid elimination, closely approaching the normal.

It may be proper to state here that according to Novy, Professor of Physiological Chemistry at the University of Michigan, the average adult in the State of Michigan eliminates about 925 grains of solids in the twenty-four hours urine. The far advanced case which gave indicanuria eliminated more than the average solids by 31 grains; while the two which improved and did not give indicanuria fell short of the normal by only 81 grains.

There were four far advanced cases which gave an indicanuria, which showed no change while under observation, eliminating an average of 486 grains of solids, which may be considered relatively high. There were no far advanced cases remaining stationary which did not give an indicanuria.

There were 14 far advanced cases which lost ground while under observation; nine of which gave indicanuria with an average of 396 grains of solids, while five gave no indicanuria with an average of only 252 grains.

There were three cases which died while under observation, two giving an indicanuria with an average of 239 grains of solids;

the other, giving no indicanuria, eliminating but 218 grains. To my mind these three cases point out very strikingly the importance of a high solid elimination.

I also noted that those cases which gave indicanuria also gave a higher solid elimination. This leads me to believe that indican has a diuretic action, as the difference in the amount of solids in the two classes of cases cannot be accounted for by the indican per se. But do not understand me to advocate indicanuria as being advantageous in tuberculosis; but I do feel that it is reasonable to believe that we might be a little more free in the use of diuretics in the treatment of tuberculosis.

The urinary findings here reported are taken from the urinalysis on admission of the patients. Whether the indicanuria and the solid elimination were predisposing causes to the disease, or whether they were after developments, I am unable to say; but it is reasonable to assume that in at least some of the cases they were predisposing causes, while in others they were after developments. Also, while it is proper that we should pay more attention to kidney elimination in tuberculosis, we should also give equal attention to it in apparent health so as to eliminate a possible predisposition to the disease.

Conclusions.

1. Indicanuria is frequently present in tuberculosis, and may always be undesirable.
2. That a high proteid diet does not seem to be the best for the tuberculous.
3. Indican seems to have a diuretic action.
4. That in tuberculosis, the higher the solid elimination, the better the prognosis. This is particularly true in the presence of indicanuria.
5. That the bad prognosis associated with indicanuria seems dependent upon the solid elimination.
6. That indicanuria and a low solid elimination by the kidneys seem to be a predisposing cause to tuberculosis.
7. That because of conclusion 6, more attention should be given by people in apparent health to kidney elimination.
8. It might be well to be a little more free in our use of diuretics in the treatment of tuberculosis.

Excision of the Whole Shaft of the Tibia; Replaced by Transplanting the Fibula.

By Gaston Torrance, M.D., Birmingham, Ala.

A white boy six years of age was admitted to St. Vincent's Hospital May 15, 1908; with the history of having struck his

right leg with a hammer over the middle of the tibia; an abscess formed at the point of injury which was incised and curetted and healed up, but re opened and was operated again a few weeks later. Congenital syphilis was suspected but no history could be elicited to confirm this. Two grand aunts and all of their children died of tuberculosis. Family history otherwise negative. Tuberculin test negative.

A considerable portion of the shaft had been chiseled out at different times, leaving a persistent sinus.

When he came under my care, about three months after admission, he was very much emaciated and ran a constant temperature.

A skiagraph showed the shaft of the tibia to be very much enlarged and in an unhealthy condition.

Excision of the tibia was proposed.

Under ether an incision was made along the anterior border of the tibia and the bone was sawn in two with a Gigli saw, leaving about an inch of the bone at either end; the shaft was removed without any attempt being made to preserve the periosteum; the fibula was then sawn in two at the upper end and transplanted to the stump of the tibia and was held in place by suturing the muscles up snugly around it.

The leg was placed in a wire splint.

A skiagraph, made a week later, showed the fibula to be in good position.

His general condition began to improve at once.

He was allowed to be up on crutches at the end of four weeks and was in good physical condition.

Two months after operation two large ulcers developed near the point of the original injury and grew larger and deeper under local treatment.

He was put on potassium iodide and the dose rapidly increased to forty drops of the saturated solution three times daily. He bore this treatment well and the ulcers rapidly healed.

On questioning the father again at this time he admitted that the child had contracted syphilis from kissing a male relative at two years of age and had been treated for about a year.

He developed an iritis about seven months after operation, which cleared up with large doses of the iodides.

A skiagraph, made five months after operation, showed that the fibula had about doubled in size and that the union with the tibia was rounded off, resembling a joint "wiped" by a plumber.

A few weeks after this he was shown before The Alabama State Association, and was walking on the limb without a splint

or crutch, the only difficulty he experienced was a slight tilting of the ankle.

The lower end of the fibula was transplanted ten months after the first operation. He was allowed to walk about on crutches for two months and then lateral splints were applied and he was allowed to put some weight on the leg.

He was lost sight of for about a year and a half and was again seen in August, 1911, when the photograph and the last skiagraph were made.

The muscles of the leg are well developed and there is no shortening; while the skiagraph shows some bowing of the shaft, the general lines of the leg are almost perfect and when standing with long stockings on it is not possible to tell which is the operated leg.

He runs, jumps and plays with the other children and has perfect use of the limb.

Chronic Visceral Pain in Relation to Surgery and Psychotherapy.*

By Tom A. Williams, M.B., C.M., (Edin.) Washington, D. C., Corresp. Memb. Soc. of Neurol. and Psychol. of Paris; Neurologist to Epiphany Free Dispensary.

American surgeons and gynaecologists have at last decided almost unanimously that the "neurasthenia" accompanied by viscerop-tosis is not at all benefited by operative replacement. But Dr. Mayo (Congr. Amer. Phys. and Surg., May, 1910) confesses himself at a loss what to do with such patients, as most of them were sent him by neurologists who had failed to relieve their sufferings. He thought that "something like Christian Science" might be the best thing. Only a few months ago, indeed, a United States Senator, in speaking against the proposal to unify all present Federal medical agencies, pleaded dramatically for the cult which had restored to health his wife and self, both invalids of long standing, whom doctors had failed to improve, and his son, a dipsomaniac, with whom, also, regular doctors had failed.

But the answer to Dr. Mayo's question is not a negation of the facts of the world like Christian Science, but a measure based upon rational psychology and a grasp of the genesis of hysterical fixed ideas and psychasthenic obsessions and phobias. The following cases show the simplicity of the procedure when the principles of diagnosis and treatment are understood; and that as Brissaud said, in the cases of both of the hysterical and psychasthenic algias, "Better give psychomotor discipline before a surgical operation, if it is to be needed after it."

SURGERY, GYNAECOLOGY AND OBSTETRICS.

CASE 1.—Hysterical appendicitis of three months duration cured by psychotherapy after failure of surgery. A girl of twenty years was referred by Dr. Watkins and Dr. Staveland because of recurrences of right iliac pain with nausea and vomiting, but with normal temperature and pulse, since three months. Two months before, the appendix had been removed for similar symptoms, and found little changed, though containing a concretion of lime. At the time, the ovaries and gall bladder were found normal. The pains recurred every few days and lasted some hours, and were relieved by morphine or the Scotch douche.

Examination showed only a psychogenic hyperaesthesia in the right iliac fossa, controllable by direct suggestion. Some colonic atonia, a slight retroversion and intestinal sand could not explain a manifestly psychogenic tenderness. So, after a few days, Dr. Watkins, armed by conviction derived from the consultation, entered the fray, and after a struggle of nearly two hours convinced the young woman that determination to conquer a longing for the comforting and anodynes which sickness brings would cure her. She went back to Illinois next day, and remains well.

Such rapid success is not common. The following similar case illustrates the need of persistence in persuasion:

CASE 2.—Coccygocutic neurasthenia from hysteria. A girl of thirty-four years was referred by Dr. Lemon because unbenefited by uterine suspension, amputation of the coccyx, and other gynaecological measures. She was lying stiffly in bed for fear of hurting the coccyx, with intense right iliac pain and tenderness. I found the latter modifiable by suggestion, as was the stiffness. There was a false, i.e., volitional, Kernig's sign, and the reflexes were sluggish. She wore the martyr smile, but professed anxiety to recover and go to work.

Her condition was manifestly psychogenic; but her sister's belief in its organic nature hindered recovery, in spite of the persistency of Dr. Lemon. But, at my instigation, he kept persuading, until finally improvement began; and one day the young woman, determined to put it to the proof, went to work, succeeded in the fierce struggle against giving way, and is now more capable than she has ever been before.

CASE 3.—Hysterical spasm from appendicitis; secondary neurasthenia; cure in two weeks by re-education. A case, intermediate as to duration of treatment, was seen recently with Dr. I. S. Stone. The patient had had a dull pain since an attack of appendicitis six years before; but had gone on working in her dairy, in spite of it, until

*Read by invitation to Washington Surgical Society, November, 1911.

it wore her out. After this, a spasm of the iliac muscles supervened. She declared herself nervous because one suffered so intensely. She would start at noises, and could not sleep after excitement; so that she gave up visiting her friends. The only neurological signs were the hyperæsthesia and spasmodicity in the right iliac region.

Treatment.—I taught her to inhibit the spasm by drill, and assured her that the hyperæsthesia would disappear as a result of the appendectomy which Dr. Stone had performed three weeks before. But as the spasm had become a habit, and gave rise to pain by stretching the muscles, she would have to learn to control it by means of a series of exercises in muscular inhibition, which I showed her how to perform. She made quick progress at first, but relapsed on account of a physical depression, which I found to be due to disordered metabolism from the egg and milk diet which her recumbent posture did not enable her to metabolize. When this was rectified the psycho-motor discipline was again persevered with, and she returned home, almost well, two weeks after I saw her.

Of course, the key to each case is that the physician have a clear notion of the mechanism of hysterical fixed ideas, of which the idea of pain and tenderness is not the least frequent.

Skill in the technique of psychotherapy is not hard to achieve after psychopathological data have been acquired. But to attempt psychotherapy, without knowing to what it is being applied, is as fatuous as the grossest empiricism in any other part of medical or surgical art. "Just as the surgeon requires, first, a minute knowledge of anatomy and pathology; secondly, the good sense to apply this knowledge clinically; thirdly, acquaintance with, and a practice of, technical advances in his art; so the psychotherapist requires, first, a minute knowledge of psychology and psychopathology (I exclude here all metaphysical notions, which unfortunately are rife in much of which has been written on psychological medicine); second, the acumen to use this knowledge clinically in diagnosis; and third, an acquaintance with, and the practice of, technical procedures as they improve."

As the cases show, the principle of the treatment is to teach the patient to use the disabled part in spite of the tenderness excited. This requires training; and it is the doctor's duty to give it, himself or through a nurse. Of course, discretion must be used not to apply this treatment to the pain of active inflammation. Again, there are times when a patient should not be urged, such as case 3 shows. It is in such con-

tingencies that lay psychotherapy is palpably defective. I cannot here enter further even into the principles which should guide the physician as to when to urge and when to rest the patient. Psychological tact and experience can hardly be inculcated in a short space. The reader who is interested may consult *Nursing for the Neurologists* (The Trained Nurse and The Hospital Review for June, 1910); *Cases Showing the Origin of Hysterical and Pseudo Hysterical Symptoms* (Journal American Medical Sciences, August, 1910); forthcoming paper on *Treatment of Hysteria* (Journal A. M. A.); also cures of hysteria without minute psychoanalysis (Post-Graduate, August, 1912); (Washington Med. Annals, January, 1900).

The Treatment of a Sprained Ankle.

By John C. Warbrick, M. D., Chicago.

A brief answer in the two words Rest and Elevation was all the advice an old surgeon once gave to a patient who called at his office to see him as to the treatment to be followed out for his sprained ankle.

Somewhat hesitating as if wishing to ask some other questions the patient, however, did not, but withdrew to hobble home as well as he could with his injured foot by means of a walking stick. The advice given being rather unsatisfactory he wondered if nothing more could be done to hasten the recovery of the injured part, for to be on his back for three or four long weeks only resting and elevating was not just to his liking, as the pain was annoying, the foot was likely to get stiff, besides it required a good deal of patience when time was valuable to have to be confined to the house for so long. Putting my foot in a tub of either hot or cold water should help it along some it seems to me and common sense should tell me that much.

Rest and elevation. Is that all to be done to relieve the swollen, painful, discolored and immovable sprained ankle of mine. The advice no doubt is alright, as far as it goes, but there surely must be something more that can be done for a sprained ankle although rest and elevation may be quite essential in the treatment.

I wonder if an osteopath could suggest anything more or get my ankle around any quicker, as I have important business to look after and must be out at the earliest possible time. They say the osteopaths are very good in such cases as these, so one might be of help to me.

It is in just such a case as this, it may be stated, that an osteopath might be called in to treat and by careful attention and skilled treatment get the patient around sooner

than he expected and thus receive his benediction and an early settlement of his bill, and future patronage.

What then is the best and quickest treatment to improve a sprained ankle which by the end of two weeks should be just about alright, and the following method is a good one to use.

Rest and elevation, of course, are necessary, for reasons that need not be explained, from the outset and the foot should be elevated fairly high.

Next the use of cold water is valuable to apply to the part from the first to reduce the inflammation and stimulate the part. This may be applied by means of cloths put in cold water from time to time, or pieces of ice may be put on, or the foot may be put in a tub of cold water, or held under a tap of cold water for a time. The use of hot water comes next, which is very useful in a sprain to promote the circulation, relieve the pain, soreness, and help remove the discoloration.

This may be applied by means of cloths dipped in hot water, then put on the part for a short time and repeated, which may be done several times a day or the foot may be put in hot water.

Some kind of a liniment may be put in the hot water and put on at the same time by means of the cloths, which will make a valuable addition to it in helping to relieve the soreness and pain. Witch Hazel may be used for this purpose; a very good thing or a good liniment to use is equal parts of Tr. Bellad. and Tr. Opii. This may be used alone or put in hot water and applied by means of cloths a few times and it will have a very beneficial effect, and is one of the best solutions to use for this purpose or in bruises of any kind.

Tr. Bellad. and Tr. Opii. may also be used in cold water at the same time and be put on by means of cloths and left on for a time. Gentle friction of the part should be used from the beginning by means of the ends of the fingers, and it may be done when the hot cloths are being used and kept up every day and as the part improves it can be done a little stronger, and this will help improve the ankle quicker. Quick results can be had from this method of treatment, and the alternate use of hot and cold water with liniment put in each is valuable.

During the night the part may be bound with some medicated plaster if necessary in the early stage, while later on stronger friction of the parts and movements of the ankle may be done to relieve any stiffness. A dry bath towel may be used for this purpose, which is an excellent thing to use.

A sprained ankle should never be left to take its own course at any time, in the

words "Rest and Elevation," or in any other way, for trouble is certain to follow. It should be worked with every day in the way detailed and a quicker and more satisfactory result will be had.

In these cases a light diet should be taken and the bowels kept well open.

The Wassermann Reaction in the Blood of the Umbilical Cord, the Maternal Blood, and the Blood of the Child After Birth.

Serra and Gentili have made tests of the Wassermann reaction in pregnant women; they also tested the blood of the fetus, the blood of the umbilical vein, the cerebrospinal fluid of the fetus and the placenta. Tests were made immediately after labor and in the puerperium, and the results were compared in women who were normal, who were suspected of syphilis, and who were evidently syphilitic. Some had been treated and others had not. There were 23 syphilitic women out of 110; in these the Wassermann reaction was positive in 17, either in the blood of the mother or of the umbilical cord. It was positive in all the mothers who were in the florid period of syphilis; according as the interval from the beginning of the secondary stage was longer the positiveness of the reaction diminished. Mercurial treatment had the same effect as in syphilis outside pregnancy. The Wassermann reaction is also positive in eclampsia and in malaria, while it is always absent in normal pregnancy and pregnancy accompanied by complications other than eclampsia and malaria. In the syphilitic fetus it was positive 50 to 120 days before any manifestations of the disease were found. It is at first only partial, gradually increasing in positiveness; it may be absent when there has been energetic mercurial treatment. The placenta of the woman who has given birth to a syphilitic fetus may be entirely normal; in the macerated fetus the villi are flattened and the intervillous spaces are narrowed; there are also vascular lesions, but no formative process in the epithelia covering the villi; the membranes showed no changes; organisms were found in the fetal side of the placenta. In women who are not syphilitic macerated fetuses may be found showing that death and maceration may arise from other causes. The reaction is positive in the cerebrospinal fluid of a fetus that has died of syphilis, and in macerated fetuses when the blood of the mother shows no evidence of syphilis.—*Annali di Obstetrica e Ginecologia.*

Headache.*

By Horace T. Aynesworth, M.D., Waco, Texas.

Probably no other symptom is treated so offhand and indifferently, and with so little regard to scientific knowledge of the true cause as headache. The patient is given a headache powder and possibly told to take a purgative, excellent advice in itself, but the cause of the headache is only too often not sufficiently inquired into, or if sought for is not ascertained. No other symptom is more annoying, if often not dangerous, to the patient than a severe headache. And we doctors owe it to our patients to find out, if possible, the cause of headache in each and every case coming to us for advice, and to direct our efforts at removing the cause; if the latter is not possible, to do all we can in that direction. Too often we are prejudiced, in our efforts at discovering the cause of headache, by the particular field of medicine in which we are specializing. Thus the stomach specialist is apt to refer all, or most, such causes to some disorder of digestion and the like; the gynecologist, to some trouble with the female organs; the oculist and optician, to eye strain, etc. This is the great trouble with the specialist. His eyes are often closed to other possibilities than those in his particular field of work. He should remember at all times that his patients are made up of many organs and parts and that disease or disorder of any of these structures may provoke symptoms that will mislead him if he is not careful. Likewise the general practitioner, in trying to keep up with his immense subject and its manifold duties, may overlook causes that are to be found in special organs, as the eye, nose, brain, stomach, etc., unless he is ever alert and watchful, and conscious of the effect of disease or disorder of special structures upon the body in general or any of its parts.

The writer would not presume to attempt to discuss headache in general; he would merely attempt to call attention to some of those headaches arising from eyestrain, diseases of the eye, ear, nose, or other organs when these are prominently co-effected.

In eyestrain the headache is frontal, fronto-temporal, or fronto-occipital, and is generally associated with use of the eyes for near, as reading, fancy work, etc. It usually disappears when near-use of the eyes is discontinued, as when one retires, and is rarely present on awaking, though certain forms sometimes are. With it we usually, though not invariably, find symptoms on the part of the eyes, such as burn-

ing, watering, redness of the edges of the lids, congestion of the conjunctivae. "Shopper's headaché," "train headache," "opera headache," "bargain-counter headache," etc., also belong to this class. Sick headaches and nervous headaches often have some form of eyestrain as their cause. The above considerations by no means exhaust the subject, but are sufficient for the present occasion.

In iritis there is often severe headache or pain, neuralgic in character and radiating to the forehead and temple and worse at night. The associated contracted pupil, ciliary congestion, discolored iris, and sensitive eye make the diagnosis fairly certain even to one with but limited experience. It is in glaucoma probably that we have our most frequent and serious mistakes. Many such attacks have been treated by the general practitioner as biliousness until the eye was hopelessly blind, or else as iritis, with untold harm to the eye and with exaggeration of all symptoms. In acute glaucoma the headache and pain are not so unlike that in iritis, though possibly worse, often being very violent. A careful examination of the eye, however, shows quite a different condition from that found in iritis. The pupil is dilated, often oval, immobile, and may show a greenish reflex. The iris is discolored, the anterior chamber shallow, the cornea insensitive, there are circumcorneal injection, congestion and chemosis of the conjunctiva, but the one distinguishing feature is the hardness of the eyeball, varying in degree up to stony hardness.

In brain tumor the patient, among other symptoms, nearly always has headache, which may be intense, boring, and almost unendurable. A cardinal symptom of this condition is optic neuritis in all of its stages from simple congestion up to a most pronounced choke disc, associated with more or less blindness. The writer only recently saw a case with Dr. J. M. Witt, of Waco, in which the headache was paroxysmal, the paroxysms being very close together and not to be relieved by large and repeated doses of morphine. His eyes showed only a moderate amount of optic neuritis. Dr. K. H. Aynesworth did a subtemporal decompression operation on him, without much relief of symptoms. About fourteen days later he was found dead in bed. The postmortem examination showed a cyst of the right half of the cerebellum practically including the whole hemisphere.

Intraocular tumor may cause the most intense headache, as in a case some months ago seen and later operated upon by the writer. A confrere presented himself with an eye objectively showing the signs of iritis and a vitreous cavity full of exudate, and

*Read before the Central Texas Medical Society at Gatesville, July 9, 1912.

blindness in that eye, with the history of its having started with a violent and uncontrollable temporal and frontal headache. The case was later diagnosed as ciliary sarcoma, the eye removed, and the diagnosis confirmed by gross and microscopic examination.

Other conditions of the eye are associated with headache, but it is not the purpose of this paper to consider all of them, only the more common ones, such as the general practitioner is apt to meet in his daily rounds.

In acute ear conditions and in acute exacerbations of chronic conditions we will have a headache radiating from the affected ear, but generally limited to the affected side. When the ear trouble is associated with meningitis, sinus thrombosis, brain abscess, etc., we will have the symptoms of the latter conditions added, but we have neither the time nor the inclination at present to discuss these conditions, as thus this paper would be unnecessarily long, and as the writer wishes to hurry on to the nose and its accessory sinuses.

In deflection of the nasal septum where pressure is exerted by the firm and unyielding septum on the delicate and sensitive swell bodies, or turbinates, we often have the starting point for severe headaches, especially where the eyes are reflexly affected. The sensitive nerves of the eyes and those of the nose are derived from the same source, namely, the fifth cranial nerve, and hence it is not surprising that the eyes are often reflexly affected and through them severe headaches may be caused. The pressure of the septum upon the middle turbinate is a prolific source of headache, which usually begins as a feeling of stuffiness and fullness between the eyes and radiates to the frontal region. The "Sunday morning headache" is accounted for by the passive congestion of the intranasal structures causing pressure by the septum on the middle turbinate. When the inferior turbinate is pressed upon by spurs and the like a very uncomfortable sense of stuffiness and pressure in the corresponding cheek may be produced. At other times no symptoms at all are provoked. Another form of headache from deflected septum and nasal obstruction and one that the writer would like to lay special emphasis on, is that arising secondarily from the deficient aeration, dryness and irritation of the throat, gastro-intestinal trouble and anemia caused by nasal obstruction and mouth breathing. A deflected septum is also one of the most frequently found causes of accessory sinus trouble. Correction of septal deflection, therefore, forms the first step in the successful treatment of many affections. The rationale of this is that

you thereby not only overcome nasal obstruction in many cases, with its host of attendant evils, but that proper ventilation and drainage of the sinuses is in a measure at least provided for. The writer believes that the influence exerted by nasal disease in the causation of disease in general and headache in particular is not sufficiently understood or appreciated by the general practitioner. Accessory sinus trouble, acute and chronic, is very much more frequently present than is generally supposed, and as a source of headache in one form or other is a most important factor. Sinus headache is often paroxysmal, in both the acute and chronic variety, but especially the latter. It often comes at a regular hour, generally in the morning, and after lasting a few hours will pass away at a corresponding time each day. This is largely explained by the anatomy of the sinuses. Such headaches may closely simulate chronic malaria, from which they should be differentiated. In case such a headache is not relieved by antimalarial treatment, the sinuses should be investigated. Then the nasal examination and the blood findings will help us to differentiate the two conditions. In acute catarrhal conditions rarefaction of the air in the frontal and anterior ethmoidal sinuses may give rise to a unilateral headache and asthenopic symptoms. Stooping increases the pain and some vertigo is often noted when the erect position is assumed.

Frontal sinus headache is usually in the frontal region, though it is sometimes seen in the occipital region, where it may be circumscribed to a small spot. Tenderness at the upper, inner angle of the orbit on firm pressure is often, and possibly usually, present in frontal sinusitis.

Ethmoidal pain is generally felt at the root of the nose or behind the eyes, though it, too, may be frontal. Ocular movements may exaggerate ethmoidal pain, while the eye muscles themselves may feel sore. Pressure at the inner angle of the orbit over the lachrymal bone often, if not always, elicits tenderness in ethmoidal disease.

Antral inflammation often causes the teeth of the corresponding jaw to feel elongated and markedly tender, especially so in acute cases of dental origin. The pain in acute trouble is not only local, but is referred to the ear, side of head, frontal region, and is markedly increased by stooping. Only in the acute cases, as a rule, do we have local tenderness. The chronic variety may give rise to frontal headache, hay fever, a foul subjective odor to the breath, in addition to the intranasal symptoms. The acute variety often given rise to alarming eye symptoms.

Sphenoidal inflammation most usually

causes occipital headache, though also temporal and frontal headache or pain at the brain and back of the eyes may be complained of. Other cases may be entirely free from headache and pain, and this is true of all the sinuses. Both sphenoidal and ethmoidal sinusitis may give rise to serious affections of the orbit and optic nerve, amounting to orbital cellulitis on the one hand and to optic nerve inflammation and atrophy on the other. The former is also true of frontal and antral trouble.

It will thus be seen that headache, and especially frontal headache, may be caused by deflection of the septum, nasal obstruction from other causes, and from inflammation, catarrhal or suppurative, of any or all of the sinuses. Associated with this symptom there are various other symptoms which have been only lightly touched upon here, but which if rightly considered in association with the intranasal findings after most careful and if necessary repeated examinations will usually suffice in clearing up the diagnosis. It is evident without argument that no amount of medication of a general nature will cure the majority of these chronic cases, but only a most careful and painstaking local treatment, combined, if necessary, with general treatment. I may add that by far the larger part of the local treatment is surgical and that the day of the nasal spray and local applications as the exclusive treatment of these various conditions is past.

Link the Past with the Present.

J. Marion Sims many years ago said, "For severe Dysmenorrhea I have found Hayden's Viburnum Compound of great service."

What was true as to the therapeutic value of Hayden's Viburnum Compound in the time of Sims is just as much of a fact today. As a remedy in the treatment of Dysmenorrhea, Amenorrhea and other functional irregularities of the uterus and its appendages, H. V. C. is dependable in action, and as it is of known composition and contains no narcotics it is safe to prescribe.

As a uterine tonic and antispasmodic it is of particular service, and to any physician who desires to clinically demonstrate its therapeutic action samples and literature will be forwarded upon request to New York Pharmaceutical Co., Bedford Springs, Bedford, Mass.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the

scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm names of Sander & Sons is illicitly appropriated, the make up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Gonorrheal Conjunctivitis.

A new method of treating this affection is advocated by the author, which is based on the facts that gonococci are rapidly killed by a temperature slightly exceeding the normal body temperature, and that they are situated almost invariably only in the epithelial layer of the conjunctiva. The latter, being superficial and easily exposed, lends itself well to local treatment by heat. Dry heat is liable to injure the cornea by the withdrawal of fluid, and steam is therefore preferable. It was generated by electricity in a boiler small enough to be as easily manipulated as any other instrument for operations on the eye. Below the tube through which the steam escaped another tube was fitted to catch the drops of condensed steam which would otherwise have scalded the patient's face.

The temperature of the steam impinging on a screen at a distance of 4 centimeters from the mouth of the tube was found to be 113° F. This temperature causes considerable pain, and cocaine is valueless, for it has no influence on the sensations of heat and cold. After a while, however, the treatment becomes so painless that even children stand it easily. No ill-effects resulted from the treatment, but some difficulty was experienced in everting the swollen and brawny upper eyelids, which sometimes required the application of iced compresses to reduce the infiltration. The delay thus caused is not, however, serious, for corneal infiltration or ulceration seldom occurs at this stage.

As soon as eversion of the eyelids is practicable, the conjunctival sac is first syringed with a solution of potassium permanganate, then dried with gauze, after which the steam is applied. When there is much

chemosis, the ocular as well as the palpebral conjunctiva should be steamed, great care being taken to avoid injuring the cornea. The skin in the neighborhood of the eyes is protected from the steam by layers of linen or wet gauze.

In the course of three months 15 cases were thus treated. All were severe, and in five ulceration of the cornea existed at the beginning of the treatment. The 10 patients with corneas uninvolved made a rapid and complete recovery, the chemosis and discharge practically disappearing in four days. In the five patients with corneas already involved, the conjunctivitis was cured and prevented from being longer a source of infection to others; in one case complete recovery of the cornea was also effected.

Although the steam rapidly reduces the discharge, some conjunctival swelling may persist for a time, as the steam tends to relax the blood vessels and thus cause passive hyperemia. It is unnecessary to reduce this swelling by the application of silver nitrate; syringing with potassium permanganate suffices.

Comparing the steam method with the silver nitrate treatment, the author points out that the latter is very imperfect, as it forms a deposit in the epithelium which becomes impermeable, and thus prevents the further action of the nitrate on the deeper layers of the conjunctiva. The gonococci also lurk in epithelial crypts and in the upper fornix, where they are difficult to attack with silver nitrate. He therefore concludes that the steam treatment is the better of the two, although it requires considerable technical dexterity.—Goldzieher, Wiener klinische Wochenschrift.

Experiences with Bromural—Goschel (Klin-Therapy. Wochenschrift,) says the physician who practices in theatrical circles has frequent and abundant, opportunities of studying the psychical aspects of the patients under his charge. Various degrees of nervous disturbance, ranging from slight irritability to severe conditions of hysterical nerve disease demand his attention. There is a large number of drugs available in these circumstances, but only very few of them are harmless, or act with certainty and rapidly, or can be taken without interrupting one's occupation. Unboubtedly Bromural satisfies these demands most satisfactorily, and the author has used it in his practice with excellent results. Some cases are referred to in detail—thus a case of hysteria with attacks of collapse and severe headache reacted promptly to Bromural. Many cases of old

standing neurasthenia; complicated with insomnia of several days' duration, and finally irregular menses with dysmenorrhoea, benefited by Bromural, which also greatly relieved the sacral and pelvic pain. The employment of Bromural in the treatment of stage fright has also yielded, good results. The drug exerted a definitely sedative action on a large number of those who suffered from this painful form of nervous irritability. In not one single case was there any intolerance manifested towards the drug; no complaint of unpleasant taste no discomfort of any kind, no troublesome secondary effect has been noted. He concludes with confidence that the value of Bromural has been established, for acting rapidly and effectually as a sedative and hypnotic in nervous types of individuals who are working daily under great mental strain.

Postoperative Ileus.

Luigi Vaccari believes that the cause of postoperative ileus is not the presence of the drainage tube, but the presence of a septic focus and circulatory disturbances; the drainage tube, the fragments of silk ligatures, and the immobility of the intestine are only contributing factors. This complication is the expression of infection only. The true factors in causation are sepsis, foreign bodies, and disorders of circulation and nutrition of the tissues. As to the desirability of drainage, whenever there is any cause for hesitation as to its necessity, one should use drainage. Hemostasis should be complete and the bleeding vessels should be covered by peritoneum, and the duration of operation should be made as short as possible.—Il Policlinico.

Combined Tuberculosis and Syphilis of the Larynx.

Thomson reports the case of a woman, aged 43, who had no physical signs in the chest, but the Wassermann was positive, and tubercle bacilli had been found in the sputum. The larynx showed the deposits of tubercle and syphilis each in a typical form. The interarytenoid space was infiltrated, and both cords infiltrated and abraded, and there were "mouse-nibbled" ulcers on both ventricular bands. The epiglottis was swollen with deposit, and there was a punched-out ulcer in front of each arytenoid.—Proceedings of the Royal Society of Medicine.

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THE RESOLUTION OF THE SYNDROME.

We Americans have a right to be proud of the name *neurasthenia* for it was an American contribution to medical science. Yet we should not hesitate to assist in defining the term more sharply and in resolving it into its elements. For *neurasthenia* is a state rather than a disease, and to give it as a diagnosis without further qualification is to confess that the pathogenesis of the particular case under study is beyond the observer's power of analysis.

We are led to the above reflection by reading the discussion of "*Neurasthenia*" in the second edition of Maurice Craig's valuable *Psychological Medicine* (pp. 259-265); for the mere statement of the symptomatology is sufficient to show that the condition may as easily result from colonic stasis as from domestic worries or excessive mental application. And yet we know a professor of internal medicine who, even in these days, is satisfied in a large proportion of his cases to give as his final diagnosis, "*Neurasthenia*."

Now that the blood picture shows the results of colonic intoxication, that Freud's analytic method enables us to delve into the subconscious, that accurate studies of the metabolism can be approximated in every well equipped laboratory, it is no longer sufficient to call the end-result of the disease the disease itself. As with *neurasthenia* so with *aneurysm*, *chloasma*, *lymphadenitis*, et hoc genus omne.

This, of course, means much for therapeutics. For the acme of therapy lies in combating the process rather than in neutralizing its effects. And yet even the newer text books on Therapeutics do not make this distinction clear. The writer attempted to do so in a text that he published a year or two since, only to find that medical men as a class could not yet grasp the distinction. Therefore he feels that there must be considerable clarifying of our thought on the matter of disease processes before it will be popular to delve into the matter of the analysis of time-honored phrases and terms. It must cease to be a sin to seek to expand the conceptions of our fathers.

Be that as it may, the work for us as physicians is the resolution of the disease picture into its elements and then the ordering

of the patient's life so as to rid it of the deleterious influences leading to that disease. This may require the administration of drugs to combat infection or stimulate vital functions. It may require surgical intervention to remove mechanical obstructions. But the clearer our conception of the pathogenesis the simpler will be the therapeutic problem,—and the better our results.

Superintendent Major D. C. Peyton of the Indiana State Reformatory at Jeffersonville, Ind., himself a physician of prominence and ex-president of the Indiana Medical Association, has announced the establishment of a laboratory of experimental psychology, and the appointment of Prof. Rufus Bernhard von Kleinsmid, head of the Department of Psychology, DePauw University, as assistant superintendent and psychologist in charge.

This is indeed a great and commendable forward step in the study of scientific criminology. The State of Indiana has ever shown its willingness to do things tending toward the improvement of its people. It was one of the first States to pass a law to prevent the marriage of those mentally incompetent, or suffering from incurable or communicable diseases, bearing especially on tuberculosis, syphilis and gonorrhea. And while the laxity of those having the issuing of marriage licenses in charge has made this law practically a dead letter, still no State can make much headway in this direction when all that is necessary for those so afflicted is to go to some neighboring State there to be married without question.

The State of Indiana was also the first to pass a law authorizing the sterilization of confirmed male criminals. This has been done in many instances, but the law has never been tested and it is extremely questionable whether it would be held constitutional by the courts. So the establishment of a laboratory for psychical research in connection with a penal institution having abundant material for experimentation is but another advance in the work of reformation and prevention which the State is endeavoring to accomplish, and it seems eminently fitting and proper that it should originate in an institution controlled by a physician.

Doctor Peyton and Professor von Kleinsmid, in outlining the future work of the laboratory, state that one cannot expect to perceive much practical good from their work for a long time to come, and expect much adverse criticism and every ridicule from many quarters. While it is to be expected that the individual inmates of the

institution will show improvement, the ultimate far-reaching worth of the movement lies in the application of deductions there formulated, by the parents of the State in more rationally coping with the many problems of proper child raising.

Psychology has ceased to be mere theory and must be accepted to be as definite as any other branch in medicine, and nowhere has it a field for greater practical good than in the study of child welfare and adolescence.

The proper rearing of children is undoubtedly the greatest responsibility which parents are called upon to assume. Notwithstanding the fact that all children of the same parents are the product of identical types of germoplasm, no two children of the same family (with the possible exception (?) of twins) are more than remotely similar in characteristics, tastes or temperament. Each child must be dealt with differently in efforts to subdue its faults and stimulate its virtues, and therefore it should appeal to all, that any step which tends to enlighten parents in the underlying psychology of childhood and adolescence, will at the same time make it more easy for them to adopt the proper correctional methods, and ultimately do much good, all tending toward better citizenship and increased individual efficiency.

ARE YOU?

Are you carried away with a certain idea, a certain belief, or a certain creed, or a fixed view of things? That is, are you riding a hobby, on this, that, or the other point of view? Be it religious, scientific, political, or whatever it may be, your mind is not normal. Any mind that thinks that *this* is the only truth, or *that* the only way, is certainly abnormal. Such a mind can neither expand nor develop. Nor can such a mind apply all its talent, power, or latent force. Such a mind moves in one direction only; it has but a single view point and the point gets smaller as the mind powers atrophy because of circumscribed action. The greater part of such a mind is dormant. The parts that are in action are over-worked, and that which is over-worked is on the road to deterioration. The normal mind of a true physician is never carried off its feet by anything, and never confines to a single view point. The normal mind is broad, tolerant, and comprehensive. The abnormal mind is narrow, fanatical and cramped. The normal mind can see the good and the true unfolding everywhere and in everything, and, therefore, as like attracts like, it attracts the good. The abnormal can see good only in its own pet system. It brands all else false or evil

and, therefore, brands everything false or evil. This is an age when the practicing physician with a normal mind must do his own thinking. He must gather food for thought from every possible source in the universe, and he must *take time to think*. An abnormal mind follows a fixed system of belief. It does not think or functionate, but simply exercises a mental imitation and in a feeble manner reflects views handed down by so-called authority. The normal mind grows naturally and orderly. It grows as the flowers of the field, developed, invigorated, and inspired by the sunshine of universal truth. The abnormal mind remains a puppet, cramped, and dwarfed by limitations of its one-idea system. The abnormal mind is practically closed to everything but the false illusions of its own isolated beliefs. A one-idea system can contain nothing but illusions. Truth is the result of all points of view, and all points of view demand wide mental scope. The normal mind is open to the light, the wisdom, the experience and the accumulated knowledge of all ages and times. It is a simple matter to distinguish between the two. It is also simple to choose the one and avoid the other. This is an age where the exact accumulated knowledge is not always recorded for the benefit of busy practicing physicians. When you read a statement that is exactly contrary to your own personal experience, *are you* to permit your own wisdom and knowledge to be carried away by the weak, feeble mind repeating an error for fear of censure? Are You?

HURRY AND UNDER PAY ONE REASON FOR CARELESSNESS.

More doctors would obtain a complete history and make a thorough physical examination of their patients if they were not obliged to work for such small fees, and so give less time than is necessary for their work. One way of avoiding this is by making a set fee covering all necessary visits. In New York City there are several doctors making a specialty of the eye, ear, nose and throat who take cases of catarrh whether it is due to nose obstruction, syphilis, tuberculosis or eye strain, for a set fee, rated according to the patient's earning capacity. This fee covers all visits until the patient is entirely well. It includes any necessary operation on the nose or ear, all refraction work, after treatments and so forth. The patient is asked to pay this at the first or second visit. This eventuates in his or her being willing to come as often as necessary until a perfect result is obtained. This fee is not necessarily a large one, varying from \$15 to \$100. Cases which are taken for a

small fee are often quite as profitable as those which are taken for a large one, as people in moderate circumstances, who are satisfied with the striking result, often send friends who are in better circumstances. One of these men was consulted by a college student who was able to pay only his minimum fee at a time indefinitely in the future. He was paid about two years afterwards, and during this time she sent the doctor between 80 and 90 patients, directly or indirectly. She would have been a profitable patient if she had never paid him anything.

Often the condition for which the patient consults you is the result of a succession of causes—faults of habit or structure, or both, and these must be ascertained and removed one after the other. For example: A patient consults you with Brights Disease or diabetes. You find that he has pyorrhea alveolaris, you send him to a competent specialist on this disease; the sugar, or albumin disappears, and your patient gets well. Back of the pyorrhea alveolaris was a fault of habit, i.e., lack of cleanliness in the care of the teeth. In addition, as a rule, dental malocclusion. Make this patient clean his teeth thoroughly every day and have a dentist clean and polish the teeth once a month, or better still send him to a competent orthodontist as well. In this way you will rectify the malocclusion and prevent a recurrence of the pyorrhea, and if you also remove the nasal obstruction yourself, which in the beginning caused the lateral crowding and dental malocclusion, you will make the work of the orthodontist much easier, and the prevention of a return of the pyorrhea more permanent. In this way you have removed not only the original cause of the trouble, but the intermediate causes as well. It would not have been sufficient to remove the nasal obstruction which was the original cause, but it was also necessary to correct the malocclusion and the pyorrhea as intermediate causes. It is such intelligent and comprehensive treatment as this which will, we believe, form the medical treatment of the future.

HABITS AS UNDERLYING CAUSES OF DISEASE.

Any diagnosis of a patient's illness is not complete which does not take into account his or her habits, as regards drugs, exercise and sex habits. For instance, on a hot day in June a young city doctor was called to see a man 32 years old apparently suffering from heat prostration, who gave a five years' history of what he called nervousness. This included indigestion, heart palpitation, insomnia, and a nervous state

so intense that he had to be accompanied to and from business by either his mother or sister. An accurate history was obtained and a thorough examination made. As regards his habits, the history showed that the only objectionable ones were that he smoked six Havana cigars daily, and that he indulged in incomplete sexual intercourse. His physical examination showed facial eczema, compound hyperopic astigmatism, for which he had been given glasses by another practitioner and which he could not be persuaded to change, and hypertrophic rhinitis. He was persuaded to use Porto Rico tobacco, which contains less nicotine than the Havana variety, and have complete sexual intercourse. A double inferior turbinotomy was performed on his nose, giving him continual nasal breathing, and within three months he was as normal a man nervously as any one in the world. Two years afterwards he walked several miles by himself, which was something he would not have dared to do before that. This man had been treated for three years by rest cures, electricity, hypnotism, and almost every other method that has been used in functional nervous diseases. He was cured by removing every fault of habit and structure which could be found without any medication whatever. How many doctors are there in the world who get a complete history and make a thorough physical examination of their patients?

One factor in the above case belongs to a class which is commonly found in the histories of chronic invalids, and that is the taking of a drug of some kind. How many people do we know who do not take some kind of drugs with a certain amount of regularity? How many men are there who do not either smoke or drink tea and coffee? How many women are there who do not have at least one of these habits? And yet nothing is so injurious as the constant and frequent absorption of small doses of any drug. In order to have a comprehensive view of this subject, we must consider that there is an essential difference between a drug and a food. A food, after digestion and absorption, becomes a part of one or many of the living cells of the body. A drug may alter the function of the cells of the body, but it never becomes a functioning part of them as in the case of a food. For instance, cane sugar, after digestion and absorption, becomes a part of the living muscle cells of the heart. Tincture of digitalis may cause that muscle cell to grow and contract more steadily and regularly, but it never becomes a part of the functioning muscle cells, which must be recruited from food actually ingested and absorbed. A large part of the human race ignores this

very simple and evident law. They persistently use drugs, under the impression that these are foods. Although it is true that sometimes an excess in food becomes a drug, still under no circumstances can a drug ever become a food, and no history is complete without a thorough investigation of the amount of drugs constantly used.

North Carolina Association for the Prevention of Tuberculosis.

The North Carolina Association for the Prevention of Tuberculosis will hold its seventh annual meeting at High Point, October 29-30, 1912.

President—Dr. Richard H. Lewis, Raleigh.

Vice-President—Dr. J. F. Highsmith, Fayetteville.

Secretary-Treasurer—Dr. Chas. A. Julian, Thomasville.

Committee of Arrangements—Dr. D. A. Stanton, Dr. J. T. Burrus, Dr. J. R. Reitzel, High Point.

This will be a very important meeting and everything is being done to make it a success. The program will be very attractive as all papers are being selected with the utmost care.

From its broad scope, the distinguished character of the men already appointed, there is no doubt whatever but that this meeting will be the greatest school for public health ever held in the State.

The meetings at Charlotte, Greensboro and Raleigh, with their large attendance, thoroughly established the popularity of such gatherings.

The High Point doctors have entered into the preparations for this meeting with such enthusiasm that it can be safely predicted that the seventh annual meeting will be the most successful and largest ever held.

On Tuesday evening, October 29th, at 9 o'clock, a banquet to those in attendance will be tendered by the High Point Academy of Medicine at the Elwood Hotel.

High Point is a beautiful little city and visitors to this meeting may expect a royal and an enthusiastic welcome.

William Edward Fitch, M.D., M.R.C., U. S. A.

President Taft, with the confirmation of the Senate, on July 30th commissioned William Edward Fitch, M.D., (Editor of *Pediatrics*, New York City) to be a first Lieutenant in the Medical Reserve Corps of the Army of the United States, with rank dating from July 3rd, 1912.

Dr. J. E. Brooks, of Montrose, N. C., has resigned his position as superintendent of

the State Tuberculosis Sanatorium. Dr. E. M. Street, of Glendon, N. C., is now in charge of this institution.

Dr. Brooks was largely instrumental in securing from the Legislature of 1907 an appropriation for the establishment of a tuberculosis sanitarium at Montrose, and later was elected superintendent. The five years of his administration have been marked by a splendid growth of the institution. There are now about 75 consumptives there.

Dr. J. Thomas Wright has located in Salisbury, N. C., for the practice of his profession. His specialty is chronic troubles, and he has an office that is well equipped for the treatment of these diseases.

Dr. J. C. Caldwell, of Salisbury, N. C., who was married to Miss Ethel Florence Mallard, of Rochester, N. Y., in June, has just returned from a two months' bridal tour in Europe.

Book Notices.

Hare's Practical Therapeutics. A Text-book of Practical Therapeutics. With especial reference to the application of remedial measures to disease and their employment upon a rational basis. By Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Fourteenth edition, thoroughly revised. Octavo, 984 pages, with 131 engravings, and 8 full-page colored plates. Cloth, \$4.00, net. Lea & Febiger, Philadelphia and New York, 1912.

This work has reached its fourteenth large edition in less than twenty-two years, and has thereby established a very exceptional record. Ingenuity in its plan and in the execution thereof, and a high degree of utility, are responsible for such unusual success. It is one of the very few books which is not only an admirable text-book for the undergraduate student, but also an almost indispensable part of the library of every physician, be he general practitioner or specialist. Such a wide field of usefulness has resulted in a demand which quickly exhausted the successive editions and thereby brought frequent opportunities for revision, of which the distinguished author has taken full advantage. He has recognized, "particularly in writing this edition, that the physician at the bedside needs and desires all the help he can get, whether it comes from laboratory experiment or bedside experience, and, furthermore, wants this help in a form in which he can use it when face to face with problems which are

of vital importance to him and to his patients. He not only wants to know what drugs can do good and how, but he wants also to know *how* to use them." In this edition the text has been thoroughly revised, a new introductory chapter has been prepared, and text dealing with the use of salvarsan, tuberculin and vaccine therapy has been introduced, together with a description of Bier's method of treatment by artificial hyperemia. The new ideas in regard to the employment of cardiac stimulants are also taken up.

As in previous editions, Part I deals with introductory matter; Part II, with the action of drugs; Part III, with remedial measures other than drugs; and Part IV, with the treatment of individual diseases, whereby the employment of the remedies discussed in the earlier part of the book is directly applied, as at the bedside. These parts are linked together by copious cross-references in the text.

Oxford Medical Publications. X-Ray Diagnosis and Treatment. A Text-Book for General Practitioners and Students. By W. J. S. Bythell, B.A., M.D., (Cantab.), Vict., Hon. Physician to the Ancoats Hospital, Manchester (Electrotherapeutic Department); Medical Officer to the X-Ray Department of the Manchester Children's Hospital; Medical Officer to the X-Ray Department of the Salford Royal Hospital, and A. E. Barclay, M.D., (Cantab.), M.R.C.S., L.R.C.P., Medical Officer to the Electrical and X-Ray Departments Manchester Royal Infirmary; Late Clinical Assistant to the Electrical Department of the London Hospital. London: Henry Frowde, Oxford University Press; Hodder & Stoughton, Warwick Square, E. C.

The contents of this volume are as follows: I. The X-Ray and Their Use in Medicine; II. Injuries of Bones and Joints; III, Diseases of Bones and Joints; IV, Examination of the Bones and Joints in Children; V, examination of the Head; VI, The Detection of Foreign Bodies; VII, Examination of the Thorax; VIII, Examination of the Abdomen; IX Examination of the Urinary System; X, X-Ray Therapeutics; Appendix, X-Ray Apparatus and Technique.

This volume is substantially bound, carefully indexed, and the illustrations are quite appropriate and well arranged. This subject which is making such progress in the science of medicine is of vital importance to the medical profession, and it is a pleasure to us to recommend a volume on this work to our readers.

The Practical Medicine Series. Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the General Editorial Charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School. Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume IV. Gynecology. Edited by Emilius C. Dudley, A.M., M.D., Professor of Gynecology, Northwestern University Medical School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago, and C. von Bachelie, M.S., M.D., Assistant Professor of Obstetrics, Chicago Policlinic and College of Physicians and Surgeons; Gynecologist to the German Hospital, Chicago. Series 1912. Chicago: The Year Book Publishers, 180 N. Dearborn St.

The editors have endeavored to present the year's work in gynecology and in some instances have made critical comments. Those articles have been introduced without comment, however, and are presented subject only to the judgment of the reader.

This volume is divided into six parts as follows: Part I, General Principles; Part II, Infectious and Allied Disorders; Part III, Malformations and Tumors; Part IV, Traumatism; Part V, Displacements; Part VI, Disorders of Menstruation and Sterility.

The volume is nicely bound, and the illustrations are above the ordinary. The price of this volume is \$1.25.

Materia Medica and Therapeutics, including Pharmacy and Pharmacology. By Reynold Webb Wilcox, M.A., M.D., LL.D., Professor of Medicine (Retired) at the New York Post-Graduate Medical School and Hospital; Consulting Physician to St. Mark's and to the Wassan Hospitals; President of the Medical Association of the Greater City of New York; President of the Society of Medical Jurisprudence; Ex-President of the American Therapeutic Society and of the Harvard Medical Society; Fellow of the American Academy of Medicine; Honorary Member of the Connecticut State Medical Society; Formerly Vice-Chairman of the Revision Committee of the United States Pharmacopœia, etc. Eighth Edition, Revised. With index of Symptoms and Diseases. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut St. 1912. Price \$3.00.

The contents of this volume are divided into two parts as follows: Part I, Materia Medica and Pharmacy; Part II, Pharmacology and Therapeutics.

In this revision, which treats of the

Pharmacopœial drugs and preparations only, every effort has been made toward condensation as far as is compatible with clearness.

The list of therapeutic agents is divided into two main sections, the Inorganic and Organic *Materia Medica*, and the general classification adopted is one based on the grouping of articles according to the chemical or physiological divisions to which each belongs.

There is a complete list of the official remedies, very elaborate accounts of their pharmacological action and therapeutics. In these descriptions the effort has been made to present the latest views of the highest authorities in these departments, and to render the book as practically useful as possible by full details regarding treatment.

This volume is well bound, and is in every sense up-to-date. We take great pleasure in recommending it to our readers.

The Pituitary Body and its Disorders, Clinical States Produced by Disorders of the Hypophysis Cerebri. By Harvey Cushing, M.D., Associate Professor of Surgery at the Johns Hopkins University, Professor of Surgery (Elect) Harvard University. An Amplification of the Harvey Lecture for December, 1910. 319 illustrations. Philadelphia and London: J. B. Lippincott Company.

The contents of this volume are divided into three parts as follows: Part I, Anatomy, Physiology, Pathology and Chemistry; Part II, Clinical Manifestations of Disordered Function; Part III, Incidence, Symptomatology and Treatment.

There are few subjects in medicine which promise a wider overlap upon the fields of many special workers than this one of hypophyseal disease. From the frequent direct implication of the optic nerve by the glandular enlargement the ophthalmologist has often been the first to recognize these maladies. The neurologists' interest was early aroused through the pressure disturbances on the part of the encephalon, and will be reawakened in view of the possible relation of epilepsy to glandular insufficiency.

This book seems to be quite complete, and we feel that the author has really given something worth while to medical literature.

The illustrations are of an extraordinary type and are well chosen.

The New Pocket Medical Formulary. By William Edward Fitch, M.D., Editor of Pediatrics; Adjunct Attending Gynecologist Philanthropic Hospital; Formerly Lecturer on Surgery, Fordham University School of Medicine; Assistant Attending Gynecologist Presbyterian Hospital Dis-

pensary; Attending Physician to the Vanderbilt Clinic, College of Physicians and Surgeons, New York City; Member of the American Medical Editors' Association; Member of the Medical Association of the Greater City of New York, etc. Philadelphia: F. A. Davis Company, Publishers. 1912.

The subject matter from which this volume is compiled has been gleaned from the results obtained by medical men of wide research and ripe experience.

Diseases are arranged in alphabetical order and the formulæ which time and clinical experience have proved most satisfactory, and given most pleasing results, are arranged under the diseases for which prescribed. A feature of this work to which attention is directed is the double system of cross-indexing, by which the reader readily refers to other sections having a corresponding relation to the disease under consideration.

The volume is neatly bound and presents an attractive appearance.

Pharmacology and Therapeutics for Students and Practitioners of Medicine. By Horatio C. Wood, Jr., M.D., Professor of Pharmacology and Therapeutics in the Medico-Chirurgical College; Physician to the Medico-Chirurgical Hospital; Second Vice-Chairman of the Committee of Revision of the U. S. Pharmacopœia. Philadelphia and London: J. B. Lippincott Company. Price, \$4.00.

The following topics are given lengthy discussion in this volume: "Drugs Used to Affect Secretion;" "Drugs Used to Affect Nervous System;" "Drugs Used to Affect Circulation;" "Drugs Used to Affect the Alimentary Tract;" "Drugs Affecting Metabolic Processes;" "Drugs Acting on Causes of Disease;" "Extraneous Remedies;" "Drugs of Minor Importance."

The volume is well bound, and contains 429 pages of reading matter. We take pleasure in recommending this work to our readers.

Arteriosclerosis. Etiology, Pathology, Diagnosis, Prognosis, Prophylaxis, and Treatment. With a special chapter on Blood Pressure. By Louis M. Warfield, A.B., M.D., Assistant Superintendent and Resident Physician to Milwaukee County Hospital; Assistant Professor of Medicine, Wisconsin College of Physicians and Surgeons, Milwaukee, Wis.; Formerly Medical House Officer, Johns Hopkins Hospital, Baltimore, Md.; Member American Medical Association. With an Introduction by W. S. Thayer, M.D., Professor of Clinical Medicine, Johns

Hopkins University. Illustrated with twenty-eight engravings. St. Louis: C. V. Mosby Company. 1912. Price, \$2.50.

This book has been thoroughly revised, a new chapter added on "Arteriosclerosis in its Relation to Life Insurance," and a new chapter added on "Blood Pressure." This is the only English book today on this subject. No subject is of so much importance today as arteriosclerosis and there is no disease that is as universally prevalent as this one.

Two chapters, "Pathology" and "Physiology," have been completely rewritten and brought up to date.

It is the authors hope that this new edition will fulfill adequately the purpose for which he prepared the book—namely, as a practical guide to the knowledge and appreciation of a most important and exceedingly common disease.

This work appears to be entirely up to date, and the general architecture of the book is most attractive.

Physical Examination of Motorists.

In Germany legislation provides for the physical examination of persons applying for motor licenses. This examination is much more rigid than might be expected. Of course, nearly normal vision and hearing are required. Those having squinting or astigmatic eyes, the color blind, and the night blind are rejected.

In the case of hearing, the whispered voice must be heard at nine feet. Especial attention is paid to the detection of those suffering from neurasthenia, giddiness, or insanity—these of course being barred.

The arm and the leg most used in operating a machine must be normal, and in case the applicant has lost one or more fingers, or has deformities of the hand, he is given an opportunity to demonstrate his fitness or unfitness for driving a car.

The provisions of this examination are so sane that the general adoption of regulations along the same lines would, in my opinion, greatly reduce the number of automobile accidents in this country.—F. M. Bogau in September Lippincott's.

American Control of the Panama Canal.

The people of the United States, in opening this canal, are conferring a great boon upon the commerce of the world, and they are especially contributing to the development of South America. In the adjustment of tolls, and in the use of the canal for the promotion of our own commerce, it would be incredible that we should be thought to have placed obstacles in the way of our own freedom of judgment. There has been

much discussion of this question, based upon a wholly inadequate study and knowledge of the subject. The Government of the United States will treat all foreign nations equally and fairly, and will treat its own citizens precisely as it thinks best. A similar principle is involved in the question of fortifying the canal. We had long ago entered upon a systematic plan of creating modern coast defenses. Such a system is ridiculous if the defenses are not located at the strategic points. The Panama Canal is in some respects our most strategic piece of navigable coast line. If we are fortifying at any points, it would seem absurd to leave unfortified the passage by which navies could go from one ocean to the other. Furthermore, an unfortified canal would be exposed to dynamite outrages which would render it impassable at a time when it might be necessary to send our fleet from the Atlantic to the Pacific, or *vice versa*. The people of the United States are conscious of pacific intentions toward all countries. They have no aggressive ambitions. In this regard they are more fortunate than are some other peoples and governments.—From "The Progress of the World," in the American Review of Reviews for September.

Abstracts of the Leading articles of the month.

Clinical Diagnosis of Cancer of the Body of the Uterus.—Eden, in The London Lancet, says that cancer arising in the body of the uterus is a clinical entity, differing from cancer arising in the cervix in its relative infrequency, in attacking women of a lower degree of fertility and of a more advanced age, and in showing no special relation to poverty and insanitary conditions. The initial symptom of cancer of the body of the uterus may be merely a blood-stained discharge, thin, watery, and odorless, the blood content being at first slight and intermittent. Later the amount of blood lost becomes larger and continuous, with occasional irregular hemorrhages of a definite, but seldom of a profuse, character. Still later pain is superadded to these symptoms; the pain is seldom severe, and shows this common characteristic of the pain of malignant disease, that at night it is as bad as, or worse than, in the daytime. Profuse hemorrhage rarely occurs in either carcinoma or sarcoma of the uterine body before the terminal stages are reached, and in many cases not even then. As regards the changes discoverable in the body of the uterus it is noted that as a rule the only change which can be discovered is a mod-

erate degree of enlargement of the body of the uterus. As a rule the cervix is found to be healthy. In earlier cases, on the other hand, where the symptoms have been of very brief duration, or where, although there is bleeding, definite enlargement is not made out, curetting for diagnosis is the proper course to pursue. When the operation is done under such circumstances the condition will often prove to be innocent. When curetting is done in this way for diagnosis the whole of the scrapings should be carefully collected, and placed immediately in about an ounce of normal saline solution to which one or two drops of 40 per cent. formalin may be added. In the differential diagnosis there are only two conditions which one needs to consider, namely, senile endometritis and uterine fibrosis or chronic metritis. Senile endometritis occurs at much the same time of life as malignant disease of the uterine body, for it is essentially a post-climacteric affection. The prominent symptom is, however, a purulent and usually offensive discharge; bleeding is often entirely absent, and when present is never considerable. Uterine fibrosis or chronic metritis differs from malignant disease both in its general incidence and in the kind of hemorrhage to which it gives rise. As a rule, the subjects of this disease are considerably below the age of uterine cancer, and as menstruation has not ceased the prominent symptom is menorrhagia; in severe cases irregular losses also sometimes occur, and altogether the hemorrhage is a good deal more than is usually the case with cancer. A leucorrheal discharge is commonly present in the menstrual intervals, but there is no discharge of blood, nor does the discharge show any tendency to become offensive. The history is prolonged and the advance of the symptoms very slow. The uterus is generally enlarged, though not so much as in cancer; its shape is normal and its consistency unusually hard.

Neosalvarsan.—(Muench. med. Wochenschr) says that since the production of salvarsan, Ehrlich has labored to improve the preparation, especially to render it more soluble and less toxic. In this he has now apparently succeeded. He had long known that the various sulphoxylates had the property of combining with various organic substances to form exceedingly soluble products. After many trials, he combined salvarsan with sodium-formaldehyde sulphoxylate, with the formation of a greatly improved product to which he has given the name neosalvarsan. The laboriousness of the undertaking is best indicated by the fact that, whereas the laboratory number of the original salvarsan was 606, the new

product is 914th substance studied. The advantages of the new substance are manifold. It is so soluble that the powder needs merely to be poured on to the surface of the water in order immediately to dissolve. The resulting solution is neutral in reaction is neutral in reaction, so that no alkali is required, and so nearly isotonic that distilled water may be used instead of saline solution. If one wants to take the rather unnecessary precaution of using an exactly isotonic solution, a 0.4 per cent. solution of sodium chloride should be used instead of the customary 0.9 per cent. solution. The presence of the inert suphoxylate increase the bulk of the powder, so that the corresponding dose of neosalvarsan is half again as great as that salvarsan. The toxicity of neosalvarsan is, however, considerably less than half as great as that of salvarsan, so that double the dose could, if desired, be given. The technique is very simple. The contents of the ampoule are poured into 200-250 c.cm. sterile, freshly distilled water, in which it immediately dissolves. It may then be injected intravenously. It is perhaps better to precede the injection by an infusion of saline solution, though this is not nearly so necessary as with salvarsan, the new product being much less irritating. Certain precautions must be taken. As with salvarsan, freshly distilled water must be used and surgical asepsis is indispensable. Neosalvarsan in solution oxidizes rather readily, with the formation of a poisonous product. Hence, in dissolving it, the mixture must not be shaken violently; the water must not be warm, but should be at room temperature; the solution must be used at once and must not be allowed to stand, even for an hour.

The Dr. and his assistant who were the first to use it clinically, report the results of 1,400 injections, given to 340 patients. Schreiber begins with a dose of 0.9 grms. for adult males, 0.75 gm. for women, 0.15 for children and 0.05 gm. for infants. Four injections are given in increasing doses, one every day. Thus the average adult male receives 0.9 gm. the first day, 1.2 gm. the third, 1.35 gm. the fifth and 1.5 gm. the seventh. Occasionally larger doses are given, frequently smaller ones. The after treatment is as with salvarsan. It may be added that the superiority of the new preparation is even more marked for intramuscular than for intravenous use.

Salvarsan in Pregnancy and the Puerperium.—Langes (Wien. med. Klin.) has treated with salvarsan eight pregnant women and twelve puerperal women suffering from syphilis, a positive Wassermann re-

action being taken as proof of the disease, sufficient for working purposes. All three methods of injections were employed. The dose given was 0.3 gram by intravenous injection and 0.3 to 0.6 gram by subcutaneous or intragluteal injection. The intravenous injections gave rise to practically no unpleasant side effects, except fever which started from a half to two hours after the injection, and lasted for from four to five hours. The other two methods of injection gave rise to marked infiltrations and considerable pain. The effect upon the Wassermann reaction was more prompt when intravenous than when intragluteal injections were made. The eight cases treated during pregnancy were all in the last three months. In all the syphilis was latent. In five of the cases one injection sufficed to change the Wassermann reaction to negative; in the other three cases a second injection was given with the desired result after delivery. In none did the injection cause labor pains to set in. None of the children in this group showed symptoms of syphilis, nor was the reaction positive in any of them. One case of cerebro-spinal syphilis which had been treated with salvarsan outside the clinic was admitted twenty-four hours later in labor; the seven months' fetus was macerated and syphilitic, and it seems most probable that, with a dead fetus, salvarsan had been the cause of the beginning of labor. Of the nine puerperal women, eight were cases of latent syphilis, one of secondary syphilis. In the last case the woman had been delivered of a seven months' macerated fetus; one other woman had aborted at the fifth month; the others had gone to term, but one child had a positive reaction at birth, and one suffered from severe syphilitic pemphigus and died a few hours after birth. The other five children were non-syphilitic. Indirect salvarsan treatment was effective in the case of the child with a positive reaction, which became negative at the end of three weeks. The five children non-syphilitic at birth were all breast fed, and none of them showed signs of syphilis later. It is noteworthy that none of the children of the mothers who were treated during pregnancy were syphilitic, while almost half of the children of the other mothers were manifestly syphilitic, or had a positive reaction. It thus appears that salvarsan cannot be given too early in pregnancy where symptoms of syphilis are present. The author believes that salvarsan treatment followed by a mercury cure may prevent abortion in a syphilitic woman and lead to the birth of a healthy, non-syphilitic child. The Dr. would have the Wassermann reaction tested in all unmarried women in order that sal-

varsan might be administered if necessary. While indirect treatment through the mother suffices to change the reaction when no other symptoms are present, he doubts whether it would be enough in cases of severe "florid" syphilis of the child. The series of cases are in opposition to Colles' laws that mothers of syphilitic children are immune from syphilis if they show no symptoms of the disease; on the contrary, the serum test shows that such mothers are to be looked upon as syphilitic.

Operative Statistics of Uterine Cancer.

—Busse (*Monatschrift für Geburtshilfe und Gynäkologie*) gives the statistics of the cases operated upon in the Gynecological Clinic at Jena during a period of eighteen months from 1903 to 1904. Only those cases are noted which were operated upon by the abdominal route. This list includes three cases of carcinoma of the body of the uterus, operated upon by the Wertheim method, all of which recovered from the operation and who were alive and free from recurrences seven years later. One patient died two years after the operation from some cardiac complication, and was already sixty-four years of age at the time that the operation was done. Of the cases with carcinoma of the cervix, there were fifty-nine operated upon out of a total of seventy-nine in which the diagnosis was made but no operation done for various reasons. The primary mortality in this number of cases was about 25 per cent., a total of fifteen cases, of which twelve died as the result of infection, one from bronchopneumonia and one each from cardiac weakness and inanition. Five years later, nineteen women were still alive out of forty-four which recovered from the operation. Of this number, nineteen or about 43 per cent. had remained free from recurrences. Of those who developed recurrences, twenty-four occurred within the first three years after operation. In twenty-three of the recurrences, the growth was localized either in the vagina or the parametrium. In one case the recurrent growth appeared in the stomach and nothing was noted in the genitals.

Decapsulation of the Kidneys in Eclampsia.—Baker (*Monat. für Geb. und Gynak.*) applied this measure as a last resort in three cases of severe eclampsia, all in young primiparæ, but without avail. The Dr. has found records of decapsulation being done for eclampsia in three cases before delivery with two recoveries and one kidney alone, after delivery, in 91 cases with 57 recoveries. The mortality in the 57 cases in which the convulsions came on

before or during labor was 45.6 per cent.; with temperatures of 100° F. or over at some point. in the 34 puerperium cases it was 32 per cent. He adds that probably a number of other unfavorable cases have never been published. Analyzing the data cited, he draws the conclusion that the theoretical bases on which the operation is based are unstable, the indications for it are but vaguely known, and we know too little of the ultimate outcome of such a serious operation as this, especially as it is done on kidneys known to be already pathologic, besides the dangers from infection of the wound—one patient succumbed to this, and one to iodoform poisoning. On the other hand, Baker calls attention to the excellent results obtained in eclampsia with Stroganoff's prophylactic method of treatment. The Dr. has had only 6.6 per cent. mortality in his 360 cases and Baker's experience is brilliantly confirming the superiority of this method.

Early Rising During Puerperium.—

—Sutherland (Australian Medical Journal) took 200 consecutive cases of early rising, the date of rising ranging from the fourth to the eighth day. Of these 118 sat up on the fourth, 38 on the fifth, 17 on the sixth, 10 on the seventh, and 17 on the eighth day. Two were discharged on the ninth, 116 on the tenth, 37 on the eleventh, 19 on the twelfth, 14 on the thirteenth, 3 on the fourteenth, 8 on the fifteenth and one on the seventeenth day. One patient returned after ten days with uterine hemorrhage. A very small piece of placenta was found at the fundus and removed by the curette. One patient fainted on sitting up in bed on the seventh day. One patient was giddy on sitting up on the fourth day. One patient complained of backache on sitting up in bed on the second day. One patient died suddenly of pulmonary embolism on the thirteenth day while being discharged in the waiting room. She sat up on the seventh day, but had a temperature on the evening of the ninth and tenth days of 103° F. and was then kept in bed. One patient complained of headache on the eighth day. One patient had shreds on the tenth day. One patient had placental tissue removed on the ninth day. One patient had triplets. Three had twins. Eight had forceps (4 per cent.). Five had post partum hemorrhage. Four had inflamed breasts (2 per cent.). Twenty-eight required a uterine douche (14 per cent.). Sixty one patients (20.5 per cent.) had a temperature of 99° F. or over at some period or other during the puerperium. If the patients are excluded in which the temperature was under 100° F. there remains 30 patients (15 per cent.)

Syphilis and Pregnancy.—

Mangiagalli (Riforma medica) considers the diagnosis of syphilis from the presence of a macerated fetus and the treatment of the mother and child for syphilitic conditions. Maceration is simply a cadaveric condition resulting from the presence of the dead fetus in the amniotic fluid, at a certain temperature without air. The skin softens, becomes red, and the body flaccid. The length of time that the fetus has been dead may be told by the condition of the eyes. The cornea is colored at the eighth day; the crystalline lens at the tenth to eleventh day. In the majority of such cases syphilis was the cause of death, but not always. The examination for spirochetes in the tissues will often determine this; also microscopical examination of the tissues of the fetus will furnish evidence of syphilis. The syphilitic placenta has specific characteristics; it is very large and heavy; it is edematous, and yellowish-gray; there are present deforming hypertrophy of the villi and sclerosis of the connective tissue. The cord shows similar alterations. As to the method of infection of the fetus, whether by mother or father, there are four possibilities. The ovule and spermatozoon may be infected and thus give absolutely hereditary syphilis. Or the germ may be transmitted through the placenta, a congenital syphilis by placental transmission. The spirochetes may be found on both sides of the placenta and in the cord. They have been demonstrated in the testicle and spermatic canal but not in the spermatozoon. There is also a hereditary dystrophy caused by transmission of the poison without the germs. When the father is healthy and mother syphilitic the infection may pass from the mother by an infected ovule or through the placenta. When the parents are both healthy at time of conception, and become infected during pregnancy the fetus will generally be syphilitic. It may be apparently healthy but shows manifestations of syphilis later. If it nurses its mother it will not be infected, because of a sort of immunity caused by the toxins which have penetrated the placenta; but the Wassermann reaction will often be positive in the fetus. The child may be born healthy, because of the length of time of incubation after infection before the secondary symptoms show themselves. If the infection takes place in the sixth or seventh month the fetus may remain normal. If the father is syphilitic and the mother healthy, or the mother appears to be healthy and is not infected in coitus, the fetus is born syphilitic, or with latent syphilis. If nursed by the

mother she is not infected, but if nursed by a wet-nurse the latter will be infected. The transmissibility of the disease lessens with time. A woman may continue to abort or have premature fetuses for many years after infection. In the father the time of contagion is gradually lessened; in the mother it remains the same. This may be explained thus: the ovules may all be infected and remain infectious permanently, while the infected spermatozoa are gradually eliminated. Tertiary lesions are generally regarded as non-contagious. In a woman the contagiousness of syphilis is not attenuated by time. The husband may be in perfect health and yet the wife continue to abort. The question of treatment is difficult, that treatment will act on the fetus through the placenta has been demonstrated. If the mother is treated a mortality of 75 per cent. in the fetus is reduced to 25 per cent.; a percentage of abortion is reduced from 30 to 13 per cent. If treatment is given early the effects are much better. Small doses may be given to the mother and will be effective on the fetus and she will not be harmed by them. The mother should always nurse the child, artificial feeding should never be tried even when the mother appears healthy, since she is not in danger of infection. The best treatment for the child is mercurial frictions. Treatment through the mother's milk is too slow in its results. Arsenobenzol should be used only when mercury has not had a good effect.

Practical Points in Seborrhea Lichenoides and Pruritus.—Noyes (Australian Medical Journal) says the subjective symptoms usually met with in disordered conditions of the skin are itching, burning, tingling, formication, tenderness, and pain. The most troublesome of them is itching. The term pruritus, about which there is some confusion, ought to be applied to those forms of itching which are not preceded by any obvious skin lesion. "It is a true sensory neurosis due to some functional disorder of the related nerves independent of any source of irritation on the surface."

Itching may be the result of external causes, as the *acarus scabei* or *pediculus corporis*, or it may be the subjective symptom of eczema, lichen planus, psoriasis, etc.; or, again, it may be produced by internal derangements of the kidneys, liver, stomach, and uterus, by glycosuria, and by lithemic conditions generally. It may be localized or generalized. If localized, apart from the situations determined by definite local causes as eczema, the most common positions attacked are the anus, the scrotum, and the vulva.

The anus, so often attacked, is in the adult nearly always associated, as pointed out by Crocker, with hepatic derangements, and the local causes, such as constipation and hemorrhoids, which appear to be the direct cause, are dependent upon hepatic disturbance.

The scrotum when involved very frequently has a definite local cause in a modified eczema.

The vulva in the adult is frequently affected, and very often as the result of genito-urinary trouble from the ovaries, uterus, vagina, or urethra, sometimes occurring obstinately at the climacteric period and occasionally during pregnancy. With regard to this pruritus of pregnancy, it may be confined to the genital regions, or it may affect areas at a distance, or may even be more or less generalized. Noyes has observed a few cases of this in which the child, when born, developed a neurosis—urticaria papulosa—with itching as its pronounced tormenting symptom. In all cases of itching in the neighborhood of the genitals, unless some other cause is quite obvious, it is advisable to examine the urine for sugar. Noyes asserts he has seen it so mild as to produce a slight sense of itching about the urethral orifice with a scarcely discernible dermatitis, but, again, so severe as to become almost intolerable, with an accompanying dermatitis extending from the knees to the umbilicus. In these localized forms about the genitals the inflammatory condition of the skin is an important factor in the production of the itching, though in glycosuric subjects the skin may itch far removed from the genitals and without any accompanying dermatitis.

Urticaria produces very marked itching, but it must not be forgotten that itching, or rather the rubbing and scratching for the relief of it, not infrequently itself produces urticaria.

Occasionally pruritus may exist only in the imagination. Noyes has recently had two cases in young adults in whom every conceivable cause was excluded, and in one of whom—a nurse-maid—he is convinced it was a hysterical manifestation, though this mental condition may proceed still further and end in complete aberration. A man under his care at the Melbourne Hospital some years ago ultimately committed suicide, not because the pruritus was intolerable, but because he developed a mental condition not far removed from insanity, of which the imaginary pruritus was one of the earliest symptoms. Crocker, excluding such cases as urticaria pediculosis and scabies, places the causes referred to above in the following order of frequency in the pro-

duction of general pruritus: Hepatic derangements "as seen in the lithemia of Murchison," jaundice, etc., disorders of the alimentary canal, kidneys, and diabetes mellitus, disorders of the uterus, ovaries, and pregnancy.

Keeping in mind what has been said regarding the cause of this nerve-racking symptom, it goes without saying that before complete relief can be expected from treatment the cause must be ascertained, and this often can only be worked out in a systematic way, excluding one cause after another, whether of external or internal origin. Cases occasionally baffle the most experienced, and in such where the primary cause cannot be ascertained the following have been suggested as likely to give some relief: Tincture of gelsemium in rapidly repeated doses, tincture of cannabis indica in increasing doses, well diluted; phenacetine and phenazone, bromides and chloral sometimes give relief.

Whilst pursuing this course local remedies must be used to help alleviate the patient or to relieve the affected area if it is the seat of an inflammatory process from the deleterious effects of rubbing and scratching, which determines more blood to the inflamed part, keeping up the process interminably. External remedies may be chosen from terebene, lysol, liquor picis carbonis, benzoic acid, carbolic acid, which are best given in lotion form if a large area is involved. Menthol is useful as an ointment for limited areas or as a soap, which may be lathered over the whole surface if the condition is generalized.

In choosing remedies for pruritus ani, note the local condition—hemorrhoids, constipation, etc.—that may be present, and recognize their definite association and the definite association of pruritus ani generally with hepatic disturbance, and treat accordingly.

Locally, mercurial preparations in ointment form, perhaps combined with one of the external remedies mentioned above, are useful.

Cocaine as a 5 per cent. solution on a narrow strip of lint inserted into the anal orifice often gives marked temporary relief.

It is necessary to remember that many of the "so-called cases of pruritus scroti are really due to an underlying eczematous process which must not be fanned into flame."

Crocker suggests painting on argentic nitrate gr. 10 to spiritus ætheris nitrosi oz. 1, or ung. hydrarg. ammoniati 10 or 20 grains to the ounce, or liquor potassæ drachms 2, acid carbolicæ drachms 4, ol. lini q. s. ad oz. 2, ol. bergamot m. 10 (Bronson's oil).

Keeping in mind all the causes referred to when previously speaking of pruritus vulvæ, it may be possible to cure it without the local remedies, though they occasionally give much relief.

The author recommends lead lotion 15 to 20 minims to the ounce; nitrate of silver 5 to 10 grains to the ounce of nitrous ether; a saturated solution of boric acid; but he gives the palm to the plan, recommended by Reeves, of applying every night with a camel's-hair brush the compound tincture of benzoin.

The Treatment of Placenta Previa.—Shaw, in The London Practitioner, reaches these conclusions:

The best method of treatment for both mother and child is, where possible, to leave nature alone, but the doctor must be in attendance until the case is over, as severe hemorrhage may occur at any time. If the hemorrhage is severe, manual dilatation of the cervix and extraction of the child give the best results, but this operation should only be carried out by an experienced obstetrician.

Internal podalic version gives excellent results to the mothers, though very bad to the children. This should always be done if the hemorrhage is severe and the practitioner not sufficiently experienced to perform full dilatation and extraction. The mother's life is always much more valuable than the child's.

Champetier de Ribes's bag, packing the vagina or cervix, and Cæsarian section are not recommended.

With treatment carried out on these lines, very few mothers will be lost; many of the children will be still-born, but the mother must always be the first consideration, and any treatment which increases her risk for the benefit of the child is quite unjustifiable.

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Tracheo-Bronchial Adenopathies.—

Maillet (Arch. de med. des enf.) says that the symptoms resulting from tracheo-bronchial adenopathy are generally due to some form of compression; they relate to the respiration, through the pneumo-gastric nerve, to the circulatory apparatus, or to the digestive apparatus, resulting from the cough acting reflexly to produce vomiting. These effects may be passing and due to pressure on the nerves alone, or may be true complications, due to aggravation, or extension of the lesions to other organs, or the entrance of new pathological factors into the situation. The first type of symptoms is found in simple adenopathies, the second type in tuberculous lesions of the glands. Crises of inspiratory dyspnea, accompanied by stridor and cyanosis may be seen. Sonorous cough and exaggerated dyspnea may occur only at night; asthmatic dyspnea may also be found in these cases. Pulmonary congestion due to changes in the vitality of the pulmonary organs is possible. Cyanosis, and hemorrhages into the meninges, and from the lungs and nose are due to compression of the venous trunks tributary to the vena cava superior. Adenopathy is seen after measles, grippe, and pertussis. Infection may enter as a cause of accidents; ulceration and perforation of a vessel by a process extending from an infected gland may occur.

Prurigo, Pruriginous Eczema, and

Lichenification.—Carl Morris, in The British Medical Journal, says that the disease usually begins in early infancy, between the eighth and the twelfth months of life. The papules are hard, small, often perceptible only to the touch, pale or reddish in color, and distributed principally on the extensor surfaces of the limbs, the lower part of the abdomen, the sacral region and buttocks, and the back and front of the chest, but sparing the joint flexures. They give rise to violent itching and, when subjected to the irritation of scratching, become reddened and increase in size. When a papule is excoriated serum and blood exude, which quickly dry into a brown crust. Other lesions appear which may resemble those of eczema (except that the flexor surfaces are still usually spared) and of urticaria, and finally the skin becomes lichenified. One crop of papules succeeds another, and the disease becomes chronic, but usually there is some abatement in summer, with exacerbation in winter. In severe cases the integument takes on a brown color, there is desquamation, the hairs are extruded, there are pustules and sores, and the femoral and axillary glands enlarge and may go on to suppuration. One peculiarity

of the disease is that after the third year of life it undergoes no further evolution. The exciting cause of prurigo has been found in bad hygiene, defective alimentation, autointoxication, etc. Brocq finds the true cause in hereditary cross-breeding in which four influences co-operate, namely, (1) the neurotic condition of one or both parents, either of long standing or operating during the mother's pregnancy; (2) lymphatism, either idiopathic or due to tuberculosis or syphilis; (3) autointoxications originating in arthritism and aggravated by bad hygiene and by life in crowded cities; (4) chronic intoxications, in which alcoholism and cafeism take the principal role. The complicating lesions having been dealt with, the indications for treatment, as Colcott Fox says, are to improve the patient's nutrition by good hygiene, generous diet, and cod liver oil; to control the itching by baths medicated with starch, sulphurated potash, creolin, etc., and to dissipate any co-existent eruption. All irritating preparations must be avoided. The external remedies employed by the Vienna school are sulphur, tar, soap, and naphthol. The tar is used especially to control the itching. Brocq holds that the best of the topical remedies is cod liver oil, one recommendation of which is that it can be used in all stages of the affection, even the most acute. If the surface is smeared with the oil the applications must follow each other quickly; and he considers it better to envelop the parts in an impregnated many-folded bandage covered with an impermeable varnish. He speaks highly of a preparation of cod liver oil and white wax in the proportion of three to one, used as a pomade, with or without covering. There is no pruriginous affection in which the itching is more intense than in pruriginous eczema. The word "lichenification" was applied by Brocq to the peculiar roughening and thickening of the skin, which so frequently followed scratching. Untreated, the patches may persist for many months or for years, or the itching and scratching ceasing, they may gradually disappear. The lichenification itself may be treated either with the x-rays or with radium. The author has had the best results with the latter.

The Lower Uterine Segment.—Grazel (Zeitschrift für Geburtshilfe und Gynäkologie) has made an anatomical study of this subject, prompted by the uncertainty which still seems to exist regarding the presence of a thinned out lower segment of the uterus in late pregnancy. The research was based on an examination of eleven non-pregnant and four pregnant uteri and also one puerperal uterus. In preparing

the sections for microscopical study, the mucicarmine stain was employed, following that with hematoxylin. By this method it was found that the internal os could be readily demonstrated and localized. He claims that there is no anatomical uterine segment demonstrable between the body of the uterus and the cervix, and that this organ can only be divided into two parts, cervix and corpus. An examination of the pregnant uteri leads the author to confirm the views of Bandel and Kustner according to which the cervix from the middle of pregnancy on becomes dilated and is taken up into the uterine cavity. The lower uterine segment therefore corresponds to the upper part of the cervix. According to this view the so-called contraction ring is merely the internal os and the area below this, which includes the dilated cervix, is the ring of Muller.

Mechanism and Treatment of Shock.

—Gray and Parsons, in *The British Medical Journal*, find that the prepuce, urethra, and the bladder show marked pressor types of curves and have a low shock value. The susceptibility of these structures to infection is marked, and this agrees with the law of inverse immunity which the authors have previously described. The enormous pressor response in prostatic operations may cause sudden death in two ways: 1. By the failure of the heart, which is usually hypertrophied in the patients affected with prostatic hypertrophy; 2, possibly, in some cases, by cerebral hemorrhage. The kidney has a high shock value, and in conformance to the law of inverse immunity it is highly immune to infection. Traction on one kidney induces vaso constriction in the opposite, due to the direct stimulation of the solar plexus. A continuation of this will eventually lead to fatigue of the vaso-constrictors and a reversal, or vaso-dilatation. They believe that this alternation of constriction and dilatation in operations upon the kidney, when both organs are diseased, with the consequent physiological disturbances, is of greater importance than the anesthetic in the production of post-operative urinary suppression. Experimentally they find that fatigue is most complete in those afferent paths supplying the area of operation. They are able to show that the vasomotor centre in the medulla is not fatigued by the most complete shock. They are led by their experiments to the conclusion that the fatigue which results in the failure of the transmission of the pressor impulses to the vasomotor centre occurs at the afferent synapses in the cord. Incomplete experiments form the basis of the suggestion by the authors that this fatigue is

due to the production of a toxine, perhaps allied to choline though not identical with it, which acts directly on these synaptic endings. Unlike Grile, they have been unable to find any definite histological changes in the central nervous system which could be ascribed to shock, particularly in a causative relation. They conclude their observations by defining shock as the "reaction of the central nervous system to exaggerated or abnormal afferent impulses." In the order of their importance the centres most concerned are: 1. The vasomotor and cardiac; 2, the respiratory; and 3, the centres of consciousness and the special senses. Their susceptibility to any sort of injury is in the inverse order. Collapse is associated with a low blood pressure and is only an end result of the reaction to abnormal or exaggerated afferent stimuli constituting shock, and is not identical with shock. The mechanism of mental shock is precisely the same as that of surgical, the stimulus being dependent in size and nature upon the hyperactivity of the centres of consciousness. Among the factors in the treatment the prophylaxis plays the most important role and consists chiefly in gentleness in manipulation and in the cutting off of centripetal impulses by cocainization where applicable and spinal anesthesia in other cases. When the depressor stage is beginning, after depression and fatigue of the pressor synapses, strychnine is of great value as it restores the activity of the latter.

Surgical Treatment of Intestinal Stasis in Children.—Ward, in *The London Practitioner*, states that under certain conditions intestinal stasis, exactly comparable to that found in the adult, may occur in the child. Such stasis has a profound bearing on the course of certain diseases, e.g., tuberculous joint disease, rheumatoid arthritis, and ulcerative colitis. Intestinal stasis can be effectually cured by ileocolostomy, and cure of the stasis is followed by relief of the child's symptoms local and general. He reports twelve cases treated for tuberculous disease of joints, one for rheumatoid arthritis, and one for ulcerative colitis by the operation of ileocolostomy. In every case intestinal stasis with secondary autointoxication was shown to be present and it was for the stasis, which was believed to be the primary condition, that operation was undertaken. The clinical picture of intestinal toxemia in children is quite definite and easily recognized. Staining of the skin is one of the most constant signs, the degree depending somewhat on the natural coloring of the child. The skin has a dirty yellow brown appearance, which is very marked in certain situations—notably the

forehead, the eyelids, the lower part of the neck, the flanks, and the flexures of the limbs. The circulation is poor, the hands and feet being generally cold, blue, and clammy. The general attitude of the child is listless, dull, and apathetic. Often children are querulous and miserable in disposition. The appetite is poor, and they are thin and ill-nourished. In normal children a meal of bismuth leaves the body in about twenty-four hours. In tuberculous children, presenting the signs of autointoxication, bismuth may remain in some part of the large bowel from 70 to 160 hours. After ileocolostomy the bismuth reached the colon in four to nine hours and had passed from the body in twelve to twenty-four hours as in the normal child.

Congenital Dyschezia.—Hertz (British Journal of Children's Diseases) defines his attitude to the above subject as follows: "As I first pointed out in a communication to the medical section in February, 1908, all cases of constipation can be divided into two classes: in the first which may be called intestinal constipation, the passage of feces through the intestines is delayed whilst defecation is normal; in the second class, for which I adopted the name dyschezia, there is no delay in the arrival of the feces in the pelvic colon, though their final expression is inadequately performed." The rectum is insensitive to tactile and chemical stimuli, and the call to defecation is a form of muscle sense depending upon the distension of the rectum, which occurs as soon as feces passes beyond the pelvic-rectal flexure. In the majority of cases the muscle sense develops as the infant grows older, but congenital deficiency is sometimes the starting point of dyschezia, which lasts through life. This is particularly likely to occur if such infants are treated by aperients, which only hasten the passage of feces through the small and large intestines where no delay exists, and do not influence the rectum, which is the seat of the complaint. The condition can be recognized by making repeated digital examinations where it is found that the rectum is constantly filled with feces, even immediately after the bowels have been opened. In many cases the loss of sensibility of the rectum is further shown by the fact that the child does not cry or offer any resistance during rectal examination. Dyschezia should always be suspected in severe cases of constipation in infants and children when ordinary methods of treatment by diet, aperients, and abdominal massage have failed. As regards treatment, the child should take an ordinary diet, and neither aperients nor abdominal massage are required. The in-

dications are to re-train the muscular sense, and this may be done by the use of graduated glycerine enemata. One ounce of glycerine is given the first day; the next day half a drachm of the glycerine is replaced by water; the third day, one drachm, and so on, the glycerine being made more and more dilute until water alone is used, which in its turn may be left off. In some cases water enemata, one to six ounces, gradually reduced act efficiently.

Drugs in Rheumatic Conditions.—Stockman, in *The London Practitioner*, says that in acute rheumatic infections the salicylic treatment is specific. Though it may not at once bring the infection to an end, it undoubtedly shortens the attack and lessens the liability to valvular and other complications and sequelæ. Large doses (just short of what would be necessary to produce symptoms of intoxication) are required: and in an ordinary case of moderate severity 15 to 20 grains of sodium salicylate should be given. To minimize the risk of acidosis, sodium bicarbonate should be given with the salicylate. When the temperature falls the dose may be reduced, but the drug should be continued for some little time. If there is any relapse the doses should at once be increased. Additional absorption of salicylic acid may be brought about by applying a dressing of methyl salicylate on lint to the affected joints, and this has the further advantage of acting as a local anæsthetic and soothing pain. In rheumatic indurations of recent origin the administration of potassium iodide and the application of a blister exert a marked deobstruent effect. Massage, if possible, is also beneficial. In cerebral rheumatism and rheumatic hyperpyrexia the salicylic treatment is of little use. The author does not believe in the salicylic treatment of chorea, but prefers arsenic and nerve sedatives in this affection. Rheumatic purpura is unaffected by salicylates. In chronic rheumatism the salicylic compounds are not of much value. Of these compounds, salicin, acetyl-salicylic acid, salol, and methyl salicylate are of most clinical importance.

Spinal Analgesia by Stovaine-glucose Solution.—M'Gavin and O'Leary, in *The London Practitioner*, give their experience with this method, and elaborate the nicer points of technique. For the average adult patient 6 c.c. of stovaine-glucose solution (5 per cent. of each in distilled water) is the dose. The exceptions to this are those of fragile women and youths between 18 and 23, patients who are feeble or wasted by long or severe illnesses, operations upon the external genital organs, and operations below the groins. In the first two of these

exceptions 5 c.c. ought to suffice, and in the last two 4 c.c. In a few cases a second injection is required, and in a few also it is necessary to give a general anæsthetic. At times, owing to an intentional effort to obtain high analgesia, or possibly to a special idiosyncrasy on the part of the patient, there has been exhibited a tendency to splanchnic vaso-dilatation indicated by some pallor, sweating, feebleness of pulse, and nausea, and at times even of retching and vomiting. Certain symptoms attributable to this method of spinal analgesia are discussed, among which may be mentioned rigors, pyrexia, headaches, backache, fainting fits, epileptic fits, retention of urine, etc. It is maintained that, with the possible exception of pyæmia, there is no condition specially contraindicating the use of spinal analgesia, provided that a very high rise is not in question.

Treatment of High Blood Pressure.—

Bain (Proceedings of Royal Society of Medicine) says that it has recently been shown that there are substances present in normal urine, which, when injected intravenously into animals, produce a rise of blood pressure. These organic bases are the product of intestinal putrefaction. He believes these to be iso-amylamin derived from leucin, p-hydroxyphenylethylamin derived from tyresin, and trimethylamin, a derivative of cholin. In cases of high blood pressure these pressure bases are either greatly diminished, or altogether absent from the urine. Low diet does not account for their marked diminution in many cases of hypertension, hence the presumption is that they are retained in the body, and produce the persistent rise in pressure. Pressure bases circulating in the blood will produce spasm of the arterioles, and continued spasm of these vessels will inevitably lead to hypertrophy of their muscular coat. If the retention of the pressure bases in the organism is the chief cause of high blood pressure, one would expect that a decrease in their formation would be followed by a reduction in the blood pressure. This does happen. Their formation can be diminished by withholding the food substances from which they are derived. They apparently begin to form about the age of 14, and are excreted in small amounts about the age of 24. Various diets have an effect upon their formation, as evidenced by their excretion in the urine. For instance, vegetables and fruit yield little or none of the bases, consequently if the increased pressure is due to the retention of the pressure bases, these food stuffs can be taken with impunity in hypertension. Eggs and fish yield a moderate amount of pressure bases; in chicken

diet the yield is more pronounced, while beef and mutton form the largest amount. If it were shown that by dieting alone the blood pressure could be kept within normal limits, it would be a great gain, for most of the methods in vogue to reduce the pressure are more or less temporary expedients. In treating cases of high blood pressure the author generally adopts the following plan: If the digestive pressure is about 200 mm. he prescribes nitroglycerin or erythol tetranitrate for a few days, puts the patient on restricted protein diet, advises strong sulphur water daily and gives him one of the following baths: Aix douche without abdominal massage, or needle douche, Nauheim, liver packs, modified Turkish electric light baths, D'Arsonval, or a strong sulphur bath. Massage of the back and extremities is helpful, and a moderate amount of outdoor exercise is very desirable. His reason for starting treatment with nitrites is because there is generally an initial rise of pressure attending bathing operations, either from apprehension or heat, which might prove dangerous. There are some patients who cannot take nitrites on account of the splitting headaches they produce. In such cases he uses either guipsine or hippurate of ammonia, puts the patient on a vegetable diet, and delays bathing for a week. The sulphur water clears out the alimentary tract daily, and is an intestinal disinfectant. The most important part of the treatment is restriction of the diet on the lines indicated. It is necessary to impress upon the patients that they must adhere strictly to the diet sketched out for them until their blood pressure comes down to normal; a vegetable and fruit diet can be made fairly palatable. While most practitioners recommend Aix douches as agents for lowering blood pressure, the author has not seen liver packs suggested for the purpose; yet in certain cases where the hepatic dulness is slightly increased, the packs have a decidedly beneficial effect. But each case requires to be treated on its own merits. Many practitioners condemn the use of alcohol and tobacco in cases of this nature, but the author considers that providing patients carry out dietetic instructions they may be allowed alcohol and tobacco occasionally in moderation. In the earlier stages of arteriosclerosis the iodides have a beneficial effect in promoting absorption of effused material, and in relieving spasm of the smaller vessels, but it is a difficult matter to decide when the arterioles are beginning to become hypertrophied. It is wiser to give iodides when there is the least suspicion of a pathological change in the vessels. But it must be remembered that in administering iodides we are not attempting to remove the cause

of the high blood pressure. The iodides do not promote the excretion of those products which produce the vascular changes.

Inunction Treatment of Syphilis.

Freshwater, in *The London Practitioner*, describes his method of treatment of syphilis which is almost identical with the treatment carried out at Aix-la-Chapelle. The patient should have a bath prior to the inunction of the mercurial preparation. The ointment employed is unguentum hydrarg., B.P., diluted from 50 to 33 per cent. The initial quantity for daily use is 5 gm. (75 grains) for males and 4 gm. (60 grains) for females. The quantity may be increased up to 10 or 12 gm. The ointment should be spread evenly over the skin of the part selected and rubbed in with the hand for a period of twenty minutes. The author states that the groins and axillæ should be avoided, practically any other region being chosen as the spot for inunction. Hairy skins should be shaved. Decayed teeth should previously be attended to, and great care in oral hygiene is necessary. The bowels ought to be moved once daily, the diet should be liberal and non-irritating, and tobacco and alcohol are best avoided. A careful watch should be kept on the urine. Folliculitis, gingivitis, and diarrhoea are the complications liable to supervene. This method of treatment is of most benefit in nerve cases and parasyphilitic conditions, such as tabes. It is most suited for severe cases or when the patient has not to go about his daily business. It is unsuitable for cases with profuse eruption or ulceration, or where much scarring is present.

The Lungs and Genitalia of Tuberculous Women.

Bardeleben, in *The London Lancet*, says that genital tuberculosis as a rule arises from pulmonary tuberculosis. On the other hand, clinical experience teaches that the prognosis of pulmonary tuberculosis becomes much worse with the complication of genital tuberculosis. Thus genital tuberculosis is usually combined with severe pulmonary tuberculosis in dissected cases, while an early removal of the genital tuberculosis, by means of an operation, often makes it possible to cure a newly kindled pulmonary tuberculosis. In pregnancy the placenta or the placenta uterina is often the cardinal point of this action and reaction: (a) It often offers a harbor to tubercle bacilli circulating through the blood, from which at every opportunity, especially at the separation of the placenta, the bacilli can be again mobilized (child-bed). (b) And, therefore, the greater the chances may be of this happening in cases of active, manifest pulmonary tuberculosis, the more injurious are the effects of the

pregnancy (90 per cent.), whereas the slighter the chances are of bacilli circulating in the blood the more seldom does the pulmonary tuberculosis become worse (15 per cent.). In the same manner is proved the agreement of the results of anatomical research with regard to the placenta and therapeutic interventions. (a) Artificial abortion produces really good results only in those cases in which tubercle bacilli are practically never found in the placenta (simple catarrh of the lungs till the fourth month of pregnancy). It produces, on the other hand, unsatisfactory results in cases in which altogether 70 to 80 per cent. placental tuberculosis is to be found (simple affections of the lungs with strongly developed placenta after the fourth month of pregnancy), or more extensive or intensive lung tuberculosis, also in the early months of pregnancy. (b) The results are just as good in either indication, if, instead of merely removing the embryo, the simultaneous excision of the placenta uterina is made.

The Etiology of Lupus Erythematosus.

Freshwater (*The British Journ. of Derm.*) draws the following conclusions:

(1) Characteristic examples of the two main varieties of the disease differ in so many respects that it is difficult to conceive that they have a common cause.

(2) In view of our imperfect knowledge concerning the etiological factors in skin diseases, we are not in a position to state that all eruptions apparently alike must be due to a single cause.

(3) There is not sufficient evidence, clinical, histological, or bacteriological, to show that lupus erythematosus is always a tuberculous lesion.

(4) The supervision of the disease on local injury to the tissues, as in the case of frost-bite, sunburn, etc., strongly suggests that a purely local cause is at times responsible for its occurrence.

(5) A large number of cases suffer from some anomaly of the circulation, so that the skin may be unable to bear an increased strain such as might be produced by a toxin circulating in the blood.

(6) That the exact nature of the toxin or toxins is uncertain.

(7) The primary involvement of the blood vessels, together with the symmetrical distribution of the eruption in the majority of cases, favors the supposition that the causative agent acts through the blood stream.

Hereditary Syphilis and its Treatment by Arsenobenzol "606".

Bunch (*The British Journal of Children's Diseases*) records some cases of hereditary syphilis treated with salvarsan. The Dr. found the intra-

venous injection of the drug more satisfactory than the intra-muscular. The youngest child treated was a boy aged 8 weeks, who was cachectic, had suffles, and a macular eruption on the face, trunk, palms and soles. The Wassermann reaction was positive and the spirochæta pallida was found in the skin lesions. A dose of 0.03 gm. arsenobenzol was injected into the bacilic vein, the dose being about one centigramme salvarsan for each kilo of body weight. By the fourth day there was a marked improvement in the general and local conditions. On the tenth day a second injection was given intra-muscularly. By the seventeenth day all symptoms of syphilis had disappeared and the child remained well till he disappeared from observation some months later. In babies it is rare that more than two injections are required. The Wassermann reaction still remains positive in many cases, and it is wise to continue the treatment with mercury in suitable doses.

Disease of Apex in Women with Sporotrichosis.—Meyer (Rev. med. de la Suisse rom.) reports a case of sporotrichosis which suggests the possibility of this fungus attacking the lungs. The *Sporotrichum beurmanni* is a hyphomycetic fungus, which occurs as a saprophyte on vegetables, but which may be found in certain animals, living or dead. It may be cultivated artificially on the usual media, colonies appearing between the sixth and ninth days. In man the usual mode of entry is through a cutaneous lesion, produced while handling vegetables, fruit, corn flour, and thorny plants, or by the bites of insects or animals. Thus sporotrichosis has followed a prick in the forearm by a barberry (*Berberis vulgaris*). It may also follow infection from a sporotrichotic abscess. A veterinary surgeon pricked himself while opening such an abscess in a mule and a hospital attendant was bitten by a rat. Both were infected with sporotrichosis. Usually the first sign is a localized cutaneous lesion at the site of infection, which may or may not give rise to secondary complications. But a septicemic form is also recognized. The lesions are multiple, and it is often impossible to decide how the disease was contracted or where the organism entered the body. Possibly it may penetrate through the tonsils, pharynx, or digestive tract. Though the skin is the site of the lesions, the organism may attack the bones, especially the tibia and phalanges, or the joints and the orbit. Sporotrichosis of the eyelids, conjunctiva, or globe has been described, and there is also a primary sporotrichotic dacryocystitis. Pierre Marie and Gougerot found induration of both pulmonary apices with pleural

adhesions during a necropsy on a case of sporotrichosis of the tibia. Though no tubercle bacilli were found in the lungs they did not feel justified in claiming this as a certain case of pulmonary sporotrichosis; but recently Gougerot has published an indisputable example of this condition. The following case came under Meyer's observation: A married woman, aged 30, was seen on April 10th, 1910, with dullness at the left apex both anteriorly and posteriorly. Respiration over this area was harsh, but there were no adventitious sounds. There was no sputum. The temperature ranged up to 101.3°. Six years previously she had been bitten on the left cheek by a mosquito. This was followed by a painless swelling, which gradually ulcerated. Antiseptic treatment carried out during two months had no effect, but the ulcers rapidly healed under compresses soaked in a solution of potassium iodide. During the following year similar ulcers appeared on the left thigh and leg and the pubes. They were equally refractory to mercury perchloride, but yielded rapidly to the external application of potassium iodide. Early in February, 1910, the patient was attacked by pyrexia, general malaise, and cough. Influenza was diagnosed. But the symptoms persisted and after the appearance of dullness at the left apex the condition was supposed to be tuberculous. At Leysin, where the patient was sent, complete rest and continuous open air treatment had no effect on the temperature. She was given rubidium iodide (77 grains in two days). The temperature at once became normal, and weight was gained. Towards the end of May, 1910, the temperature again rose, and there were articular pains suggestive of subacute rheumatism. Several preparations of salicylic acid were given without effect. The patient then went to Paris, where the pyrexia and articular pains yielded to a preparation containing iodine and aspirin. On December 2nd, 1910, she was again seen by Meyer. Except for the cicatrices of the cutaneous ulcers, and fibrous induration of the left apex her condition was normal. The specific serum reaction for the sporotrichum was investigated in Paris and found to be positive. As there was no sputum and tuberculin was not used for diagnostic purposes it was impossible definitely to exclude tuberculosis in this case. Though pulmonary sporotrichosis and tuberculosis may co-exist the prognosis in such an event is most unfavorable. Syphilis could be definitely excluded. Hence the positive serum reaction and the action of potassium iodide indicated a probable sporotrichotic origin of the pulmonary lesion.

Miscellaneous.

The Power to Recuperate

Resident in the tissues, may be markedly augmented by Cord. Ext. Ol. Morrhuæ Compound (Hagee), and with many physicians it is a routine practice to employ it for this purpose.

The usefulness of Cord. Ext. Ol. Morrhuæ Comp. (Hagee) as a reconstructive lies in the nutritious elements contained, which when fed to impaired tissues build up and strengthen them. Each fluid ounce of the Cordial represents the extract obtainable from one-third fluid ounce of cod liver oil (the fatty portion being eliminated), 6 grains calcium hypophosphite, 3 grains sodium hypophosphite with glycerin and aromatics. It is free from grease and the taste of fish.

"Paraldehyd" possesses many of the good without the evil qualities of chloral. Used in insomnia resulting from various causes. The objectionable taste of the chemical is, to a great extent, disguised in Robinson's Elixir Paraldehyd (see page xiv this issue) which is an elegant preparation.

Household Syphilis (Syphilis Oeconomica) and Acquired Syphilis in Children.

J. A. Nixon (Bristol Med.-Chir. Journ.) records six cases, four of which occurred in children. (1) Girl, aged 15 years, chancre of dorsum linguæ, mucous tubercles on tonsils, shotty glands in neck, and later roseola. Her mother had recently been treated for syphilis acquired by extra-conjugal intercourse, and the father was under treatment for secondary iritis. (2) A woman infected by her husband gave birth to a syphilitic baby which died soon after birth. Within two months the baby's sister, aged two years, was found to have a sore throat, roseola, and condylomata. The primary lesion was not discovered. Two months later the woman's sister's child, aged eight months, acquired a chancre of the lower lip and infected its mother's breast. (3) Girl, aged 14 years, with gummata of legs following chancre of cheek at four years, acquired from her mother, who had been infected on the finger when a ward-maid in a lock ward. (4) Girl, aged four years. Chancre of left tonsil. Source of infection obscure. Chancres in children are small, almost always extra-genital, and are frequently mistaken for non-syphilitic affections. The mouth, tongue, and especially the tonsils are the commonest sites. The secondaries are often benign and are

less severe than in congenital syphilis.—British Journal of Children's Diseases.

Prolapse of the Uterus and Pregnancy.

—Solomons (Jour. Obst. Gyn. Brit. Emp.) says that it is difficult to lay down any definite rules for the treatment of prolapse and pregnancy, but the following seem to be rational: 1. In an ordinary case pessary treatment. 2. In a case where the pessary does not correct the displacement, having regard to the danger of abortion and septic infection of the prolapsed uterus, either perineorrhaphy or a thorough curative operation for the prolapse. 3. In a case where infection has occurred, after a thorough cleansing of the cervix the uterus should be emptied. If the uterus is septic, hysterectomy with drainage should be practiced. Vaginal suspension is strongly recommended for the cure of mobile uterine displacements, especially for patients who require other vaginal plastic work. The operation has a large percentage of cures, and tends to no untoward symptoms in pregnancy, labor or the puerperium. These statements are borne out by the replies received by the writer from twenty-six former patients of the Rotunda Hospital. Of these, nineteen were well since the operation, one was relieved for some months, three were fairly well and three were not relieved. All but five considered themselves cured; one had had two babies since the operation; seven had had one baby; one had had six miscarriages; one had had two miscarriages; four had had one miscarriage. There was no dystocia in any of the cases.

The Cause of Telangiectases and Abnormal Cutaneous Reaction.

Among the alterations in the skin which may arise subsequent to treatment by the Röntgen rays the appearance of telangiectases possesses a special interest, for they can crop up in skin apparently sound even years after exposures which have been carried to the length of occasioning dermatitis. Hitherto no satisfactory explanation has been forthcoming, but Luthlen of Vienna (Dermatol. Wochenschr., Hamburg, 27th April, 1912) attempts to account for them. A patient of nervous constitution, suffering from psoriasis, was attacked with urticaria, in association with which a severe seizure of asthma came on. On a portion of skin, which four years previously had been the seat of an erythematous dermatitis, resulting from a therapeutic exposure to the X-rays, but which had since then been free from psoriasis and wholly normal, there developed severe swelling and reddening of the skin, with patches of psoriasis. When the psoriasis had faded as the result of local

treatment a network of dilated vessels became visible on the now white skin, and these spread over the entire area where the dermatitis had manifested itself. Luithlen remarks that this case indicates that the eruption of psoriasis is not solely evoked by external irritants, but also by changes taking place within, through direct action on the blood vessels. Freund has noticed that on the occurrence of pregnancy telangiectases have appeared in apparently normal skin which years before had been exposed to the X-rays. In the case cited there were toxic substances present which poisoned the system and induced the urticaria. One can certainly assume an effect of these circulating toxins on the vessels. On all parts, except those which had previously been rayed, the influence was transitory. We know that the X-rays can damage the vessels, and that this may proceed to extensive anatomical alterations. Even slight exposures to the rays alter the reaction of the skin towards external irritants, producing increased sensibility to therapeutic interference. Thus regions affected with psoriasis, which have had only a few and these brief exposures, react with abnormal intensity when chrysarobin or pyrogallol are applied, though neighboring parts which have not been rayed stand the same drugs without detriment. He ascribes the telangiectasis in his recorded case to a permanent alteration in the vessels having been brought about by the rays, even though the skin presented a normal aspect. The toxin which originated the urticaria, and which in the case of normal vessels only caused a passing congestion, transudation, and exudation, produced in the already damaged and therefore less resistant vessels which had experienced the Röntgen dermatitis a lasting dilatation. In pregnancy, in like manner, there are toxins thrown into the general circulation, generated by changes in metabolism, and such can act on the vessels whose vitality has been lowered in the same way as the toxins in urticaria. Other observers as Krause have established the fact that various circumstances in the sexual life of women, such as menstruation and lactation, as well as pregnancy, produce increased sensibility or anaphylaxis in the skin towards exposures to X-rays. An irritation of the vessels as a sequence of the presence in the circulation of special products of metabolism may explain many phenomena whose connection with the sexual sphere clinical observations have hitherto only vaguely hinted at.—*Edinburgh Medical Journal.*

Pneumococcal Laryngitis Followed by Suppurative Arthritis, Endocarditis, Septicemia, and Death.

Abrahams reports the case of a man, aged forty-five years, who was admitted to the hospital with urgent dyspnea and stridor of three days' duration. The onset of the disease was said to have been sudden. The larynx was edematous and intensely red. He had slight bronchitis and a temperature of 102.6° F. The urine was very scanty and contained 0.1 per cent. of albumin. He had slight edema of the hands and legs. Cultures from the throat showed a majority of pneumococci. During the next four days the patient steadily improved, the larynx recovered, and it was thought that he might soon be well enough to leave the hospital. On the sixth day he had a rigor, with a temperature of 104.6° F. He then had daily rigors for six days, when he complained of pain in the right shoulder joint. Exploration revealed thick,ropy pus in the subacromial bursa, which pus gave a pure growth of streptococcus. Some improvement followed for a few days; afterwards there were daily rigors, the heart became affected, and streptococci were recovered from the blood. Death occurred three weeks after the operation on the shoulder. Post mortem: The larynx was still a little inflamed; the heart had large, green, recent vegetations on the tricuspid valves such as are usually found with pneumococcal infections. The heart's blood contained streptococci; the lungs showed recent pleurisy and septic infarcts; the spleen and the liver were both enlarged.—*Proceedings of the Royal Society of Medicine.*

Gonorrhea.

Stress is laid by the author on the necessity for applying treatment early if results in any way comparable to an abortion of the disease are to be secured. The gonococcus should be reached while it is still on the surface of the urethral mucous membrane. The procedure recommended by the writer consists in injecting into the urethra 1½ drams (5 c.c.) of a 1:6 solution of argyrol. The injection should be made slowly, so that no pain is occasioned, and the fluid retained for five minutes. After the injection the patient should stay as long as possible without urinating. Two injections should be given by the physician daily, one in the morning and the other in the evening. In the interval the patient should himself make two injections of a 1:25 solution, the total number of injections per diem being thus four. Patients treated in this way in the earliest stage of gonorrhea are cured in from two to five days.

The stronger injections should be continued until the urethra is dry and all inflammatory redness has disappeared. After this the patient may himself keep on injecting a weak solution of the drug.—Minet, *Revue moderne de medecine et de chirurgie*.

Gonorrheal Conjunctivitis.

A new method of treating this affection is advocated by the author, which is based on the facts that gonococci are rapidly killed by a temperature slightly exceeding the normal body temperature, and that they are situated almost invariably only in the epithelial layer of the conjunctiva. The latter, being superficial and easily exposed, lends itself well to local treatment by heat. Dry heat is liable to injure the cornea by the withdrawal of fluid, and steam is therefore preferable. It was generated by electricity in a boiler small enough to be as easily manipulated as any other instrument for operations on the eye. Below the tube through which the steam escaped another tube was fitted to catch the drops of condensed steam which would otherwise have scalded the patient's face.

The temperature of the steam impinging on a screen at a distance of 4 centimeters from the mouth of the tube was found to be 113° F. This temperature causes considerable pain, and cocaine is valueless, for it has no influence on the sensations of heat and cold. After a while, however, the treatment becomes so painless that even children stand it easily. No ill-effects resulted from the treatment, but some difficulty was experienced in everting the swollen and brawny upper eyelids, which sometimes required the application of iced compresses to reduce the infiltration. The delay thus caused is not, however, serious, for corneal infiltration or ulceration seldom occurs at this stage.

As soon as eversion of the eyelids is practicable, the conjunctival sac is first syringed with a solution of potassium permanganate, then dried with gauze, after which the steam is applied. When there is much chemosis, the ocular as well as the palpebral conjunctiva should be steamed, great care being taken to avoid injuring the cornea. The skin in the neighborhood of the eyes is protected from the steam by layers of linen or wet gauze.

In the course of three months 15 cases were thus treated. All were severe, and in five ulceration of the cornea existed at the beginning of the treatment. The 10 patients with corneas uninvolved made a rapid and complete recovery, the chemosis and discharge practically disappearing in four days. In the five patients with corneas

already involved, the conjunctivitis was cured and prevented from being longer a source of infection to others; in one case complete recovery of the cornea was also effected.

Although the steam rapidly reduces the discharge, some conjunctival swelling may persist for a time, as the steam tends to relax the blood vessels and thus cause passive hyperemia. It is unnecessary to reduce this swelling by the application of silver nitrate; syringing with potassium permanganate suffices.

Comparing the steam method with the silver nitrate treatment, the author points out that the latter is very imperfect, as it forms a deposit in the epithelium which becomes impermeable, and thus prevents the further action of the nitrate on the deeper layers of the conjunctiva. The gonococci also lurk in epithelial crypts and in the upper fornix, where they are difficult to attack with silver nitrate. He therefore concludes that the steam treatment is the better of the two, although it requires considerable technical dexterity.—Goldzieher, *Wiener klinische Wochenschrift*.

Diagnosis of Disease of the Large Intestine.

In disease of the large intestine the bismuth meal is of comparatively little aid in establishing or confirming a diagnosis. The bismuth injection per rectum, although but seldom used hitherto, seems likely to be more helpful. Yeomons (*Medical Record*, 1912, LXXX, 159) recommends the injection to be given while the patient is in the Sims' posture, ten to fifteen minutes before he is examined. The photograph is to be taken while the patient is lying prone. The bismuth injection always traverses the colon as far as the cæcum, unless presented by some mechanical obstructions—kink, stricture, tumor or fæces. When there are symptoms of abdominal pain, constipation, tumor (either palpable or suspected), or abnormal constituents such as mucus, pus, or blood in the stools, and when the usual clinical methods have failed to establish the diagnosis this method of Röntgen-ray examination is indicated. The bismuth injection is not attended with any risk to the patient. By its use any abnormalities in the size or position and any tumor or stricture of the colon are revealed as clearly as by operation. Further, if an operation is necessary it can be planned out in advance, thus saving time and manipulation and lessening shock. And, lastly, the bismuth injections lessen the number of exploratory operations and by establishing an early diagnosis enable an operation to be performed at an early date.

Hænisch, writing upon the same subject, is in favor of screening the patient while the injection of bismuth is being given per rectum. The injection can thus be watched passing upwards along the intestine, and the site of any obstruction defined. The method is useful for the differentiation of spasmodic from organic stricture of the colon, and in defining the relation of palpable tumors to the intestine. The diagnosis must always be controlled by the ordinary clinical methods of examination, and a positive diagnosis should never be founded upon the findings of a single Röntgen-ray examination. A control examination on a subsequent day should invariably be made. —Edin. Med. Journ.

Fee-Splitting.

The American Medical Association in its session at Atlantic City has modified the Code of Ethics in attempting to bring it into closer touch with the practical, honorable conduct of the every-day practitioner, and one statement of the law as it now stands takes cognizance of the difficulty the general practitioner often has in collecting what is due to him when he has referred the patient to a specialist. The section is as follows:

"It is detrimental to the public good and degrading to the profession, and, therefore, unprofessional, to give or to receive a commission or to divide a fee for medical advice or surgical treatment, unless the patient or his next friend is fully informed as to the terms of the transaction. The patient should be made to realize that a proper fee should be paid the family physician for the service he renders in determining the surgical or medical treatment suited to the condition, and in advising concerning those best qualified to render any special service that may be required by the patient."

The question arises, "How is the patient to be made to realize that a proper fee should be paid to the physician?" Physicians are frequently called in to find a man suffering with an acute surgical condition, appendicitis for example. The patient is given attention requiring quite as much skill and knowledge as the surgeon subsequently exercises and corresponding benefits are given, but the striking thing is the operation and the matter foremost in the minds of the patient and his family is the operation. No question of the payment to the physician can well be raised at such a time. There is urgent need of action to save life and the doctor must start the processes into activity. It is true that the fee of the surgeon is decided upon, as a rule, and even advance payments may be made. When it is all over and the doctor sends his

bill, the answer often enough is, "You did nothing, we have paid the man who did the work." Or else there is long delay and discontent as to the settlement. If the surgeon were to incorporate into his bill an amount commensurate with the physician's services and pay it to him without any suggestion of a rebate, this difficulty would be avoided. We realize that this may open the way to less commendable practice but no law can keep a man honorable nor make a good man dishonorable. An alternative might be in the insistence on the part of the surgeon that the physician's services should be recognized before the work has commenced, but this is as open to the objection of "commercialism" as anything else. Rules and codes of rules are of little value after all. We know what honesty is and the use of common sense in its practice will keep us close to good conduct. Add "business sense" and the professional man will be able to strike a just balance between the patients' needs and his own requirements in making a living. Sometimes the idea of humanitarian service carries its devotees too far and proves fatal to the very men who would do the good work. This is a sacrifice that is detrimental to the race. —Atlanta Journal-Record of Medicine.

Trachoma Bodies.

Any investigation, even of a negative character, which serves to throw light on the cause of the infectious character of so troublesome a disease as trachoma is to be welcomed. The bacteriology of trachoma is at present a series of negations, and this is especially unfortunate as the disease has such ill-defined clinical boundaries that the discovery of the specific cause would alone render possible any real advance in its study. Secondary infections are so frequent in this disease that not unnaturally numerous organisms have been credited with its causation, whose claims in this respect have subsequently been shown to rest on no substantial basis. One of these, the trachoma body described by Halberstaedter and Prowazek, has claims which are difficult to disprove. These bodies were regarded by their discoverers as being true parasites belonging to a new group of intracellular organisms—the chlamydozoa. Their non-specific character has, however, been shown by finding them in cases other than trachoma, and even in very slightly inflamed or normal conjunctivæ. A recent paper by Dr. S. B. Wolbach and Dr. S. Hanford McKee carries the matter further by furnishing a probable explanation of the true nature of those trachoma bodies, which, as the authors show, occur only in these portions of the conjunctival epithelium

which are the most injured, and where typical mucus-secreting cells are absent. A careful study of the bodies by smear preparations and in sections, together with comparative studies of other mucus-secreting surfaces, have lead these investigators to the conclusion that the trachoma bodies represent mucus secretion under pathological conditions, and consequently that their parasitic nature is disproved.—*The London Lancet.*

Treatment of the Three Main Symptoms of Gastric Ulcer.

Læper states that these symptoms are hemorrhage, vomiting, and pain. The treatment of the first is the most important part of the treatment of gastric ulcer. The essentials of this treatment are: Complete rest in bed, ice per os or in local applications, hot rectal injections, and drugs. In subacute hemorrhages perchloride of iron or bismuth salts may be useful; but adrenalin, chloride of calcium and gelatin are certainly better and may be given per os with excellent results in all cases of hemorrhage. Ergotin, ergotinin, or adrenalin hydrochloride may be given in hypodermic injections; their action is rapid but temporary and often there is a recurrence of hemorrhage soon after their use. Horse serum or normal saline solution are also useful, the former in hemorrhages of long duration where there are distinct modifications of the blood, the latter in profuse or prolonged hemorrhages to make up for the loss of fluid of the system. Gelatin solution may also be tried hypodermically, but it seems to be less used nowadays than some years ago. The food must be as bland as possible, and Læper is distinctly in favor of the old-fashioned milk diet for at least four weeks; however, when the hemorrhage cannot be checked rectal feeding must be tried. Vomiting must be checked by external means and cold applications (ice, ether, etc.), since the analgesic mixtures taken per os are likely to cause vomiting. Alkaline powders are very often of great value and generally well borne. For hypodermic injections, a mixture of atropine and morphine gives excellent results in most cases. Nitrate of silver may also be of use, but it is likely to give an extra stimulus to the mucous membrane of the stomach which is already so irritable.—*Progres Medical.*

Systolic Blood Pressure in Heart Disease.

The observations recorded by Korke were made on patients suffering from (1) simple, uncomplicated valvular lesions of the heart

due to acute rheumatic endocarditis; (2) valvular lesions due to other causes; and (3) other heart affections. No systemic complications were observed in cases of valvular lesions due to rheumatic endocarditis. There were no cyanosis, dyspnea, changes in the fundus oculi, febrile temperature and albuminuria, though traces of albumin were sometimes detected in a few cases. The observations were made on patients of both sexes, of different ages. They were allowed a mild out-door exercise, and generally they were keeping in good health. The apparatus used for the observations was a sphygmomanometer, a Martin's modification of Riva-Rocci. The systolic blood pressure was recorded by the armlet method during the recumbent posture of the patients. The observations were made daily, under similar circumstances, nearly an hour before dinner (at 1 p. m.), and in cases of doubt they were repeated two to three hours after 8 p. m. A record of pulse rate and number of respirations was kept during the observations, and sphygmographic tracings of the pulse were often made to note the effect of blood pressure on the pulse. In valvular lesions of the heart (with or without complications), due to rheumatic endocarditis and other causes, the blood pressure was found to be normal or above normal. In simple and uncomplicated valvular lesions of the heart, due to acute rheumatic endocarditis, the blood pressure was found always to be normal or above normal. In aortic incompetence, complicated with anginal attacks, the blood pressure was found to be subnormal during the interparoxysmal periods. As to the significance of high blood pressure in simple and uncomplicated valvular lesions of the heart due to rheumatic endocarditis: The high blood pressure observed in some of the cases is, Korke believes, a physiologic compensation in those individuals, though it may be mistaken for a pathologic state. The blood pressure in cardiac muscle failure was normal, as well as above normal. In valvular lesions, complicated with chronic nephritis and arteriosclerosis, the significance of supernormal blood pressure requires no comment. It is distinctly pathologic.—*London Lancet.*

Kinesitherapy in Mucomembranous Enteritis.

Lanel believes that mucomembranous enteritis is essentially a nervous disorder affecting the intestine through the solar plexus. There is a spasmodic condition of the intestine which produces constipation, and this alternates with apparent diarrheal movements in which the scybællæ are mixed with loose feces. Hyperexcitability of the

sympathetic system is at the bottom of this condition. Another etiological factor is hereditary arthritis, which in the descendants causes vulnerability of the vascular and nervous systems. Mucomembranous enteritis is, then, a trophoneurosis, secretory and motor, caused by irritation of the sympathetic system. Spasm of the vessels and irregular nutrition of the intestinal walls, accompanied by lack of function of the intestinal glands and liver, cause prolonged digestion and putrefaction of the albuminoids and favors the growth of bacteria in the feces. Irritation causes increase of mucus, pain, and spasm, and one has presented the whole syndrome. In the treatment of this condition one should be guided by the degree of the disease at which the patient has arrived. In slight degrees the treatment consists of simple movements in which the patient's strength is not taxed; these take up the interest and attention; general massage and passive movements are also used. Circulation is improved, cellular nutrition increased, and the function of the glands and muscles is increased. The massage used locally over the abdomen should be very gentle and consist of stroking motions in the line of the colon. As the health grows better open-air sports should be gradually begun. When inflammatory symptoms are present the abdominal massage may be done over the hand of the operator with a vibrator, which has an anesthetic effect on the intestines. Kinesitherapy permits of many forms of graded movements, adaptable to the different conditions of the patient. It allows of active and passive movements, and such as call upon the use of the intelligence and will of the patient, and give a physical re-education. Thus it is a complete method.—*Annali di Electricita Medico e Terapia Fisica.*

Hyperostosis Cranii.

Waggett and Davis report the case of a newsman, aged 22, who complained of swellings of the face and of nasal obstruction. He first noticed the swellings at about the age of 16, one month after receiving "a punch on the nose." He had never been abroad, and none of his family were similarly affected. He was given a mixture of mercury and potassium iodide for six weeks, and no change in his condition was noted. The patient was of poor physique, but well nourished, and had well-marked symmetrical osseous swellings involving the nasal processes of the maxillæ and extending on to the facial surfaces of the bodies of the maxillæ. The maxillary antra were opaque to transillumination, but the frontal sinuses were normal. The nasal bones were unaffected, but both sides of the

nose were obstructed by the hard osseous swellings, which could both be felt and seen within the nostrils. The infraorbital margins were involved and there was lacrymal obstruction on the right side, but in other respects the orbits were apparently normal. The optic disks were normal. In addition, there was a diffuse smooth swelling of the body of the mandible, to the right of the mental eminence, and surrounding the mental foramen. The teeth were carious and there was considerable oral sepsis. The left ear was normal, but he had otitis media on the right. There were neither signs nor history of syphilis, but the Wassermann reaction was positive. Skiagrams showed both maxillæ occupied by dense masses of bone. The rest of the skeleton was normal.—*Proceedings of the Royal Society of Medicine.*

Primary Tuberculous Cystitis.

Virghi states that although in many cases tuberculosis of the bladder is secondary to tuberculosis of the kidney or prostate, still in a considerable number of cases it may be shown to be primary in the bladder. These cases are quite curable by local applications to the bladder combined with attention to hygiene and diet such as is given in tuberculosis elsewhere. The bacilli carried in the circulation directly to the bladder cannot determine a specific affection unless they find a susceptible soil for their action produced by a catarrhal lesion. The principal clinical forms of tuberculosis of the bladder are that depending on renal or prostatic disease, the primary vesical form, and that produced by contiguity, or ascension of the bacilli from the genital organs. The principal symptoms are hematuria, never very prolonged, and due to congestion of the bladder, pain, which is often extreme, preventing cystoscopy and catheterization, and urinary symptoms. There is pus in the urine, but in less amount than is found in abscess of the kidney. Frequent micturition, nocturnal enuresis, and in the early stages an increased amount of urine, with incomplete retention, may be found. The urine remains acid in reaction, the bacteriological examination is interesting, while the chemical examination is of little value. There is present an increased number of leucocytes, which are polyhedral, dentated, or prolonged. Cystoscopy shows in primary cases congestion about the mouth of the bladder, while in renal tuberculosis the congestion is around the mouth of the ureters, and the tubercles are placed there. The author's treatment is local and although it lasts some time it results in a cure. He also attends carefully to the general health. Locally he evacuates the bladder completely,

and then injects analgesic and antiseptic solutions, using corrosive sublimate with cocaine once daily. This lessens the pain and cleanses the bladder.—*Giornale Internazionale delle Scienze Mediche*.

Eosinophilia in Hook Worm Infection.

It is generally admitted that demonstrations of the presence of ova in the stools is the only certain method of diagnosis in this condition. When it is necessary to examine large numbers of men, as a prophylactic measure, it has been suggested that examination of the blood for eosinophilia might be sufficient.

A case recorded by Coppedge (*Journ. Trop. Med. and Hyg.*, 1st June 1912) shows that even in a very severe infection the blood may show an absence of eosinophiles. When the patient's condition had much improved the blood only showed one eosinophile in several slides.

Figures published by Bass, Dock, Gomez, Chamberlain, and others show that while degree of eosinophilia may be as high as 36 per cent., it is often, in well-marked cases, as low as 1.3 or 1 per cent., these low counts auguring a bad prognosis.

It is therefore evident that examination of the blood may be misleading, and examination of the stools is essential for reliable diagnosis.—*Edinburg Medical Journal*.

The Cultivation of the Bacillus of Leprosy, and the Treatment of Cases by Means of a Vaccine Prepared from the Cultivations.

Both Rost and Williams (*Lepra*, vol. XII. fasc. 3 London, 1912) have succeeded in a few cases in isolating and cultivating bacillus. Rost employed a medium of distillate of volatile alkaloid of rotten fish, Lemco, and milk, while Williams used Lemco, distilled water, and milk, and the organism obtained was practically the same in both instances Williams got also a streptothrix, and is disposed to regard the bacillus as a phase in the life-history of a streptothrix. A monkey repeatedly injected by Rost with culture developed clinical signs of leprosy, and nodules appeared in which were found typical lepra bacilli. He failed, however, to produce a pure cultivation from these. A vaccine was prepared, and in ten cases in which treatment by this vaccine has been adopted two have recovered, two have so much improved that apparently the remnants of the disease are very slight, while the remaining six have benefited remarkably. William has experimented with a vaccine made from a two-months' old streptothrix membrane grown on milk. This has produced, in

appropriate doses, marked general reaction and also local reaction and also local reaction in the leprosy lesions present in lepers. These reactions have followed by improvement in the leprosy condition. Two anaesthetic cases treated by the vaccine have shown a rapid return of sensation in the affected areas. In non lepers there was a certain degree of reaction for twenty-four at the site of injection, and slight fever. The reaction produced by the vaccine in lepers seems to be proportionate to the severity of the disease.—*Edinburgh Medical Journal*.

In order further to popularize the demand for BACTERINS—(Bacterial Vaccines), and enable physicians to make more general use of these products we call attention to the downward revision of prices on Mulford Bacterins, effective August 5th.

The Mulford Bacterins are in every case "polyvalent", which means that the bacteria contained in a Bacterin, although of the same species, are obtained from many different sources. For instance, Strepto-Bacterin is polyvalent, the bacteria used for its preparation are all streptococci and are isolated from different patients suffering with streptococcal infections among which may be mentioned puerperal sepsis, general septicemia, erysipelas, tonsillitis, empyema, cellulitis, etc.

A number of the Mulford Bacterine are "mixed" by which is meant that they contain the various bacterial species generally present in a mixed infection. For instance, the mixed Vaccine of chronic gonorrheal infections, besides the gonococcus contains various staphylococci, colon bacilli streptococci, and other organisms isolated from cases of chronic urethritis and prostatitis.

In some cases, diseases from their inception are due to mixed infections, while in many others the infection becomes a mixed one as the disease develops. Past experience and results have fully established the advantages claimed for these "polyvalent" and "mixed Bacterins".

The Plague Situation.

For several years the Journal has emphasized the importance of watching the progress of the plague pandemic and its movement in the direction of the United States. The experience in San Francisco and along the California Coast has been an incident in that progress, which needs notice. The officials in the service of sanitation in the Canal Zone have been guarding against plague ever since they took charge, and so far as the incidence of the

disease in the Canal Zone is concerned, this has been reduced to nil.

We are facing a problem which has menaced the whole sea coast on all sides of this country, and it must be met with every precaution which can be brought into service.

With the announcement of the plague case in Havana, the local representative of the Federal Government, Dr. J. H. White, with his usual regard for obligation in such times, promptly began operations in New Orleans to inspect and properly quarantine the shipping from infected ports, to organize the local health forces so as to examine rats along the water front and to further plans for the eradication of rats and to provide measures of prevention.

The Orleans Parish Medical Society appointed a committee of eleven with the power to act in formulating plans of conference, education, etc., and the Progressive Union, through its Public Health Committee, offered cooperation.

Meantime, the State and City Boards of Health have begun educational measures, the State Board particularly having issued a bulletin of information on the rat and its relation to the public health.

The timely statement from Dr. J. H. White in the public press regarding rat infection with plague and its relation to human plague is wise enough to be noted. The statement was made that often rat plague may exist without infection of the human subject and that rat plague may last for years before human plague appears. More than this, the fact was emphasized that cleanliness in person and in the premises about a household is the strongest safeguard against plague.

The local organized forces have already begun the system of rat investigation so successfully employed by Heiser in Manila, namely in investigation rats in definite surveys and trying to locate any infected area, with the intent of restricting that area, and of destroying all rats in it. Heiser by this means not only rid Manila of human plague, but also eliminated rat plague.

It has been generally acknowledged that the complete destruction of rats is impossible and no means as yet have been devised to destroy rats. This does not discount the need of destroying all the rats possible in any territory, and the movement should be general over this country to war on rats.

The large returns in rat extermination at the various rat killings in Texas and other towns show the feasibility of concerted action in this regard and perhaps no better advisor in this can be found than the family physicians. The danger in rat

killing with the possibility of plague infected rats, however lies in the fleas which infest the rats, so when the rat killing begins, it ought not to be forgotten that a large amount of crude coal oil should be on hand to be used for dipping the rats, in order to kill the fleas. The practise of pouring crude coal oil about the premises as a dead line for rat fleas is also recommended by some authorities, and this advice may be followed as precautionary when the rat killing begins.

We are not writing in any way as alarmists, but the public needs to be educated, and timely advice may be of some service to our readers who may make the opportunity to spread the gospel of prevention in season.

The Control of Pain.

The work of the conscientious physician is many sided and diverse, but no part or detail of his manifold duties is ever more obligatory or imperative than the control of pain. In the presence of physical suffering and other consideration than its prompt and positive relief, with rare exception, becomes of secondary importance. But insistent and pronounced as the physician's duty always is to control and assuage the pains to which human flesh is subject, it should ever be his aim to accomplish this noble purpose in the best, as well as in the quickest possible way. Otherwise, with regard only for a patient's comfort, it is extremely liable that the agencies of relief will be attended by consequences serious in the extreme and not infrequently more harmful in effect than the original pain itself.

The foregoing has particular significance for the cautious physician, inasmuch as he has Papine a pain-relieving measure that enables him to control pain promptly and effectively, with the least possible untoward action. Representing as it does all the anodyne properties of the most potent opiate, but with the usual objectionable features reduced to a minimum. Papine is undoubtedly the most efficient analgesic at the command of the profession. Compared with the useful opiate, Papine will be found much more free from those disagreeable effects ordinarily considered inseparable from preparations of opium, such as constipation, nausea, gastro-intestinal derangement, and tendencies toward habit formation. Thus it can be employed in a wide variety of conditions with confidence, not alone in its anodyne and sedative action, but equally in its avoidance of disagreeable or unpleasant by-effects. In brief, Papine is the ideal preparation of opium, presenting

all the advantages of this well-nigh indispensable drug with its nauseating, constipating and habit-forming tendencies reduced to a minimum. Innumerable physicians use it to the exclusion of all other opiates since it enables them to secure all of the well known benefits of the most potent opium derivative—with gratifying freedom from the usual disadvantages.

High-Potency Antitoxin.

A noticeable preference for concentrated anti-diphtheria serum (globulin), as compared with the older or "regular" form of diphtheria antitoxin, has manifested itself among the medical fraternity. "High potency, small bulk," appears to be the order of the day. A good index to the tendency in this direction may be found in the offerings of the manufacturers, who, as a matter of course, are promptly responsive to each new demand of the profession. For confirmation of the belief that the concentrated product is now in the ascendancy one has but to turn to the announcement of Parke, Davis & Co. in the current number of this Journal, *Antitoxin That Justifies Your Confidence.* Here one finds prominently featured the concentrated antidiphtheric serum (or globulin). It is interesting to note in this connection that a wider range of dosage than formerly is now offered—from 500 to 10,000 antitoxic units—the larger doses, of course, being provided for several, late or other exceptional cases. And herein, at least, is one undisputed point in favor of the concentrated antitoxin: when a large dose is needed, it can be administered in this form without difficulty and with little danger of disturbance, owing to the comparative smallness of its bulk. Some physicians, it may be noted, are under a misapprehension as to the nature of the concentrated antidiphtheric serum (globulin), assuring that it is widely different from the product which they have known for years as antidiphtheric serum. The idea is wholly erroneous. Concentrated antidiphtheric serum (globulin) is the regular product, precipitated and purified, from which most of the serum constituents have been eliminated except those bearing the antitoxin. It is in no sense inferior to the original serum—on the contrary, as previously noted, it possesses the advantage of lesser bulk.

A Livery Corpse.

A country doctor, returning from a visit in the small hours of the morning, in the time of the "body snatchers," had to pass a secluded burial ground, in which a deceased patient had been interred the day be-

fore. When he reached the wall he saw a horse and trap standing unattended on the road outside. Looking cautiously over the wall, he saw that two men had just disinterred the corpse. Standing in the shadow of the wall, he saw them bring out the body and place it in a sitting position on the seat of the trap, so that, when they drove away, the body, which they had wrapped in a dark cloak, would in the dimlight look like a third man, sitting between the other two. Then got over the wall again to fill in the grave. The doctor lifted the body down from the trap, laid it under the wall and seated himself in its place. After a short time the two men got over the wall again, threw their spades into the back of the trap, seated themselves one on each side of him and drove off. Presently one of the men said to the other: "The body seems to be warm still." The other replied: "So it is." Then the corpse said, "Warm! and if you had been where I have been for the past twenty-four hours you would be warm too!" The two men leapt with a yell out of the trap at opposite sides and ran for their lives.—*British Medical Journal.*

The Survival of the Premature Infant.

Tissier presents a study of the viability of premature infants with reference to their legal status in various countries. Germany the state of maturity of the fetus in order it may inherit is not defined, but proofs that the child had lived must be given; in Spain it must have lived for 24 hours completely separated from its mother; in England it must have given some signs of life after birth; in France 140 days of intra-uterine life must have elapsed in order for the child to have been viable. Theoretically it is generally accepted that the child is not viable until the sixth month and cannot inherit. The author describes a case under his observation in which the child was born on January 4, in the Charite Hospital, the weight being 990 grams, and length 31 centimeters; the eyes were closed, the nails were incompletely formed, the body was red, and the movement were hardly perceptible. The infant was at first fed with a stomach tube, and later began to swallow and suck. The last menses occurred about the end of June. The patient thought conception occurred about July 14. Thus the child, still alive at the time of writing, and 36 days old, had five months and twenty days of intrauterine life. The law does not provide for such a contingency.—*Gazette des Hopitaux.*

The Ice Bag in Appendicitis.

In a most interesting article by A. M. Fauntleroy, Surgeon of the United States Navy, Medical Record, August 3, 1912, the fact is brought out, basing the same upon a large number of cases of appendicitis operated, that the ice bag is positively harmful in this condition. In 50% of the cases operated, where the ice bag was used the condition seemed to indicate that there was a noticeable lack of effort on the part of nature to wall off, from the rest of the abdominal cavity, the appendix, which was frequently very much congested, gangrenous or perforated. He also observed that in the ice bag cases there was a surprisingly low white cell count when one took into consideration the condition found in the abdomen at the time of the operation. From 8,000 to 11,000 white cells was the rule in these ice bag cases when one would be justified in saying that the pathological condition warranted a constitutional reaction of from 20,000 to 30,000 leucocytes, or even higher.

On the other hand, in those cases in which the hot water bag or morphine had been used prior to operation (the ice bag not being used at all), the white count corresponded to what one would expect. Dr. Fauntleroy advances from his findings the logic that while the ice bag causes numbness, practically the same as in the condition of frost-bitten ear or toe, it also decreases hyperemia, leucocytosis and stasis in the part to which it is applied. That heat is the direct antithesis of cold in encouraging favorable physiological action in inflammatory processes, whether superficial or peritoneal, seems to be from his report most logically and conclusively proven.

In applying heat whether it be for peritoneal or inflammatory conditions of a more superficial character, the most rational method is to use that which is not only sanitary, but, for the comfort of the patient does not require frequent changes. In this respect, antiphlogistine, on account of its heat retentive properties, its cleanliness, and its ease of application, should appeal to the professional mind. That antiphlogistine has proven of great therapeutic value as a thermic agent is best indicated by its extensive professional employment and its many advantages over the hot water bottle and other methods of application of heat is readily discernible.

The Graces in Medical Literature.

While we seem to be right in the Golden Age of scientific research and achievement; while discoveries follow each other in quick succession, and while book after book comes

to us laden with new and helpful knowledge, we cannot but notice, with few exceptions, one missing link in the harmonious whole, and that is the lack of seeming effort to clothe these valuable contributions in nice garments of English.

If one would read from that masterpiece of literature, Meig's Practice of Midwifery, or that charming volume, Watson's Practice of Physic, where the words and thoughts ripple along with mellifluous rhythm, and then labor through some of the ponderous tomes of today, our point of view would be quickly understood.

None of the various articles of manufacture and commerce are placed before the consumer without the expenditure of every effort to make them attractive. The current literature of the day is replete with all literary accessories that go to make it interesting. The popular magazines are seeking with avidity for scientific articles, that possess both worth and nicety of diction. It would seem, therefore, that the medical writers might note with profit the trend of the times, and would find to their gratification that the small additional labor required to smooth and beautify their worthy offerings would produce a bountiful fruitage of grateful readers.—Atlanta Medical Journal.

Iodine Fumigations in Gynecology.

Reynes states that this method gives excellent results in all uterine affections which may be treated per vaginam, like ulcerous metritis of the cervix, cervicitis, or granulosomatous metritis. It is also useful for the disintegration of uterine cancers, after scraping the superficial layers of the tumor. Iodine vapors may also be introduced directly into the uterus. The author is employing this treatment with success in cases of postabortal metritis. The modus operandi is very simple; After carefully swabbing the vagina and cervix, the author introduces into the vagina a small pledget of cotton wool dipped in iodoform, which has been passed in the flame of a spirit lamp, candle or match. The combustion of the cotton wool is instantaneous, and the heat of this combustion is sufficient to set iodine free, so that iodine vapors fill the vagina, which has been previously dilated with a speculum. A deposit of iodine soon takes place in the vagina and on the cervix. Another method consists in heating the tube of an insufflator, insufflating iodoform, and bringing free iodine into contact with the diseased part. None of these methods requires any special apparatus.—Progres Medical.

Antityphoid Inoculation.—Leishman (Glasgow Medical Journal) says that as to the use of typhoid vaccine in the treatment of actual cases of enteric fever there is difference of opinion. In some quarters feeling is strongly against it, as it does not, on the surface, seem rational to inoculate a case with more of the germs which are causing the disease. Yet Leishman believes there is good scientific foundation for such treatment, and he has had some first-hand, and a good deal of second-hand, experience with it, amounting to some forty or fifty cases. The conclusion he has reached is that inoculation of cases of enteric fever with typhoid vaccine is a most valuable means of treatment, and that the vaccine therapy of these general infections will in time prove of great use. His experience in treatment was that small doses did no harm, but at the same time did no good. The dose was then increased from 50 to 100 millions every third day, with which excellent results have been obtained. The number of cases so treated is too small to base general conclusions on, but all who had to do with the patients thought they had benefited greatly. The enteric facies disappeared, the patients said they felt better, and in two or three cases they even asked that the vaccine should be repeated! Also, it seems to reduce the size of the spleen and to increase the flow of urine, which is thought to be a favorable sign. Shortening of the fever is difficult to judge.

As to the temperature, the result of vaccination is to raise the temperature in the following twenty-four hours about 1° F. over what might have been expected, but it soon falls, and to a lower point than before inoculation. About the third day after inoculation it tends to rise again; another injection is given, and the same result follows. And, finally, the temperature touches normal, and remains there.

There has been, in cases treated with the vaccine, a very notable absence of severe complications and of tendency to relapse. He says the method is now being used frequently in the United States. As to the relative advantages of using a stock vaccine or an autogenous vaccine, Leishman thinks that stock vaccine gives better results. As to dosage, very small doses appear inefficient, and, as far as our present knowledge goes, he would recommend starting at a dose of 50 millions, cautiously increasing it to 100 or 150 millions. In his opinion the vaccine treatment of enteric fever is sound practice, and will grow in favor as time goes on.

Pituitrin in Labor.—Alfred Studeny (Wiener klinische Wochenschrift) reports

on a large number of labor cases and cases of abortion treated by pituitrin at the midwifery hospital in Brunn. Pituitrin is a watery extract of the hypophysis which pharmacologically and in some of its physiological effects is similar to adrenalin. V. Frankl, Hochwart, and Frohlich found that in rabbits, both during pregnancy and when giving suck, injections of pituitrin led to an increased excitability of the muscles of the bladder and hypogastric nerve, and to the production of strong and protracted contractions of the uterus. They therefore recommend the use of pituitrin in gynecological and urological practice. This recommendation has been fairly widely followed with good results. In the author's cases Parke, Davis & Co.'s preparation was used. The original dose of 0.6 Cc. was found to be too small, and as a rule 1 Cc. was given in the latter cases; larger doses were given in the third stage of labor without harmful result, but without any special advantage.

The effect of pituitrin in exciting labor pains was usually apparent in from three to five minutes, but was in one case postponed to eighteen minutes. As a rule, the pains set in moderately, increased gradually, and began to weaken after about an hour. In a few cases, but never in those in the first stage, tonic contraction of the uterus occurred, and persisted in one instance for as long as five minutes.

Pituitrin was used in 89 labor cases. In the first stage the effect in strengthening the pains was very marked, and was very noticeable in one case of a primipara thirty-seven years of age. In five of the cases the effect, though marked, was only temporary, and in spite of repetition of the dose it could not be stated with certainty that the labor had been shortened in duration. In the expulsive stage pituitrin gave excellent results in thirty-four instances, most of them protracted cases; in fifteen the birth followed during the first quarter of an hour after the injection, in thirteen during the next hour, in six during the next two hours. On the other hand, the extract failed in some cases of abnormal resistance on the side of the soft parts or bony pelvis, and failed also in eight cases of primary uterine inertia.

Pituitrin was further given in five cases of rigidity of the soft parts, six cases of disproportion between the head and the pelvis, three of craniotomy with contracted pelvis, nine of placenta previa, six of induction of labor. In two cases the pains stopped after a short time, and in a third pituitrin had no effect. In the cases of induction of labor, pituitrin was used in combination with operative measures, and a definite opinion as to its value could not be

formed. In one case, however, of a thirty-eight-year-old 4-para, who in previous labors had had few pains and had been delivered by forceps, and had suffered twice from severe yostpartum atony, labor pains set in strongly after 3.6 Cc. of pituitrin had been given in the course of forty-eight hours, and forceps were only applied with very little force, while the puerperium was normal. In the whole series of cases in which labor ended spontaneously there were only two of postpartum hemorrhage, and none of atony. In the operative cases, however, there was a large proportion of cases of hemorrhage, nearly all of them in cases in which pituitrin had failed to act. These facts suggest a tonic action of pituitrin on the uterine muscle continuing after labor. The results were not especially good either when pituitrin was given only after delivery, or in cases of early abortion. Pituitrin was not found in any case to be harmful to the child.

On the whole the author considers pituitrin to be the most reliable agency for strengthening labor pains which we possess, and also considers that given during labor it lessens the likelihood of postpartum atony. It is very unreliable when atony is developed. Pituitrin is non-poisonous. It is without effect in the production of uterine contraction during the early months of pregnancy.—British Medical Journal.

Treatment of Malignant Syphilis.

In malignant syphilis, v. Irtel has tried all the customary salts of mercury but has always obtained the best results with chromate of mercury (hydrargyrum chromicum oxydulatum). He uses at first a 1:30, then a 1:20 suspension in liquid paraffin ($\frac{1}{4}$ - $\frac{1}{2}$ -1 Pravaz syringe-ful). The injections are made intramuscularly into the gluteal region twice a week and usually 4 to 6 injections will suffice. The patient also takes tonics, such as arsenferratin, arsentriferrin, iodoferratose and iodolecthin and particularly good results have been obtained with injections of arsentriferrin. Mercury chromate seems to be superior to the other salts of mercury and often clears up the sores more rapidly even than salvarsan. Its effects are most manifest in the tertiary forms of syphilis of the bones and brain and in syphilis of the nervous system. A fact not generally known is that ichthylol is also an excellent though mild remedy in many forms of syphilis. Thus, skin lesions will often disappear after intramuscular injections of a 10 per cent. sterilized solution, while locally, a plaster of ichthylol may be employed to advantage. Rarely, cases of syphilis will be encountered where mercury and iodine in any form will be ineffectual.

Here, arsentriferrin, internally, subcutaneously, intramuscularly or intravenously will often work effectively. It is probable that this drug is more than a tonic in that it also induces a leucocytosis, kills the germs and neutralizes their endotoxins. The effect is often enhanced if combined with iodipin. In all cases where arsentriferrin was injected into the veins, the spirochetes could no longer be detected in the blood so that the effects of this drug are similar to those of salvarsan. The author has cured a number of cases of syphilis with intravenous injections of arsentriferrin where salvarsan proved a failure.—Klin. therap. Woch.

Artificial Pneumothorax.

The creation of an artificial pneumothorax is not an altogether harmless process, yet, with proper technique, is not a particularly difficult or dangerous operation. It is not indicated in incipient or mild cases of tuberculosis, but, on the other hand, should certainly not be restricted to the most severe cases. Suitable cases, according to F. Klemperer, are those where the usual dietetic and physical measures have failed and where change of climate and a course of tuberculin injections have not caused any appreciable improvement, particularly if the process is slowly progressive. Experience with cases where a pleural exudate was replaced by gas or where the chief indication was hemoptysis, seem to show that the results are best in the earlier stages of the disease and in cases of medium severity. J. W. Samson is also of the opinion that the artificial pneumothorax gives excellent results in a certain, though small number of cases of tuberculosis, which cannot be obtained by other remedial measures at present at our disposal.—Berl. klin. Woch.

Treatment of Pemphigus.

Since many of the drugs recommended for pemphigus have proven ineffectual, H. Merz has tried salvarsan with the following result. After 0.2 Gm. intramuscularly, the eruption became more pronounced, while after 0.3 Gm. intravenously, the patient reacted with severe chill, fever and vomiting. After this unsatisfactory experience, the patient was allowed to rest for a week then twice daily 0.25 Gm. quinine was given. After 6 days there was a decided improvement. The dose was then increased to 0.25 Gm. 8 times daily and complete recovery resulted after 65 grams had been taken in 59 days. No bad after-effects of any kind were observed. Other measures resorted to were two weekly baths of potassium permanganate and tumenol salve locally. The X-rays were finally applied to stimulate the

growth of the epidermis. It seems that the effect of salvarsan in pemphigus vulgaris is not so good as in pemphigus vegetans.—Deutsch. Med. Woch.

Paroxysmal Tachycardia.

Oppenheim recommends the following treatment for paroxysmal tachycardia. Between the crises, treat the organic lesion, if one is present, and, above all, avoid overexertion, mental and physical, and excitements of all kinds; avoid all excitants in the shape of tea, coffee, and tobacco. The food taken should be eaten slowly, and well masticated, and avoid all foods that overload the stomach. After food take sodium bicarbonate, prepared chalk, and powdered belladonna leaves. Take twice every day, some preparation of valerian, which can be alternated every fifteen days with arsenic or quinine and ergot. During the paroxysm the patient should from the beginning lie on the back and breathe slowly, and a slight compression of the right pneumogastric nerve at the level of the neck may be exercised. Deglutition should be provoked by means of liquid, or better, large pills containing any inoffensive material; best of all, give three cachets of extract of hypophysis (0.25 Gm. in each) at intervals of ten minutes. If the attack has not passed off in twenty-four hours, provoke vomiting by giving syrup of ipecacuanha. If this fails, one or more injections of morphine (1 cg.) should be given in the day. If notwithstanding all this the attack lasts for two or three days, and signs of cardiac failure become manifest, injections of strophanthin should be employed intramuscularly, $\frac{1}{2}$ c.cm. or $\frac{1}{2}$ mg., repeated the next day, and increased if necessary to 1 mg., and if this is unsuccessful, then a demimilligram intravenously.—Brit. Med. Jour.

Treatment of Gastro-Enteritis of Infants.

Schirmer treats the gastro-enteritis of children by first evacuating the bowels thoroughly with calomel. Children up to three months old then receive 0.3 Gm. Tannalbin three to four times a day, while with older children the dose is increased to 0.5 Gm. Gastric lavage is dispensable and is only rarely resorted to. The treatment usually requires three to four weeks, and the dose is generally diminished during the last week. Every case of so-called dyspepsia was cured despite the fact that many were complicated by rickets and other constitutional disturbances. The green color of the stools usually disappeared after three to four days, and after two or three more days they appeared more solid and diminished in frequency. At the same time the

mucus disappears. The vomiting was generally checked within one week. The children no longer look sick and an increase of weight is evident early. Excellent results were also obtained in cholera infantum, and only two out of 22 cases died of this dread illness. In only five cases were there recurrences, and these were controlled as well as the original attack. Even in severe cases of colitis with blood in the stools the effects of tannalbin were all that could be desired.—Wien. med. Woch.

Indications for the Use of Calomel as Diuretic.

Indications for the use of calomel as diuretic are severe hydropic conditions in cardiac disease if cardiotonics and other diuretics are without effect. If there is low blood-pressure and arrhythmia, the combination with digitalis seems justified. Congestion of the kidneys is never a contraindication. Excellent results are also obtained where a diuretic effect is desired in the presence of syphilis as in mesoarteritis, luetica with edema, luetic liver disease with portal stasis and luetic renal disease with general edema. In ascites with portal stasis a result can be expected only if the stasis is due to a syphilitic lesion or if a collateral circulation has been established naturally or artificially. Calomel is contraindicated in the presence of idiosyncrasy, peritonitis, tuberculosis of the peritoneum and intestinal obstruction and in parenchymatous nephritis. To test the tolerance, no more than two doses of calomel 0.2 Gm. plus extr. opii 0.005 Gm. are given on the first day, to be increased on the following days until 4 to 6 doses are given. The dose is then diminished for 2 to 3 days so that the entire amount of calomel taken is 3 to 5 Gms. Iodides should not be prescribed at the same time. Calomel is not a pure renal diuretic but directs fluid from the intestines into the blood.—Fleckseder, Wien. klin. Woch.

Salicylic Acid in Gynecology.

According to Hirschberg, one of the best analgesics for painful gynecological troubles is salicylic acid. It has been used with success in many cases of acute and subacute pelvic cellulitis, salpingitis, oophoritis and parametritis and also does good service in dysmenorrhea and in painful conditions without pathological changes. Treatment may be combined with the "columnization" of the French, that is, the vagina is tightly packed with iodoform gauze and two tampons which are renewed on the fourth day. This packing will act as a suspensory and keep the inflamed and painful parts at rest. It is only rarely necessary to keep the pa-

tients in bed with this treatment.—Berl. klin. Woch.

Carcinoma of Skin.

The author reports a case of skin carcinoma in a male 63 years of age, in which the local use of a 1:1000 solution of the active principle of the suprarenal appeared to exert a marked influence in causing retrogression and final disappearance of the growth. The solution was either painted freely over the tumor surface or a few drops of it injected into the tumor; the injections were followed by edema of the tissues, and were therefore given only on a few occasions. Radium treatment, previously given for some time, had had but little effect. Adrenin was then added, and from the start distinct benefit was noted, the ulcerated area steadily diminishing in size. A wet dressing of lint soaked in the adrenin solution was applied each day. When the adrenin was temporarily stopped, the radium being continued, there was shown a tendency to relapse. The radium was then stopped and the adrenin used alone, at which period the process of healing appeared to be most rapid. Finally, the ulcer was completely covered over, a smooth, hardly visible scar being left. Six years have elapsed since the disappearance of the growth, without any indication of recurrence.

The healing of the ulcer at its margin had apparently been initiated by the adrenin. Its mode of action was obscure. It might have diminished the vitality of the tumor cells by inducing anemia locally, but such an influence would have lasted only a short time. In the process of healing there was no necrosis of the tumor mass, leaving a cavity to be filled up by granulation, but apparently a gradual replacement of the tumor at its periphery by healthy new tissue.—Peel Ritchie, *The London Lancet*.

Tuberculosis of the Mesenteric Glands in Children.

From observations of a large number of abdominal sections in children the author has been forced to the conclusion that tuberculous mesenteric glands are to be found in practically every child submitted to operation. Since it has been proved that microorganisms are a hundred- or a thousand-fold more numerous in the cecum than in any other part of the alimentary tract, the author thinks there can be no mistake in assuming that the great entrance of tuberculosis from the intestine to the body is by the lymphatics of the ileo-cecal region and that, therefore, tuberculosis of the mesenteric glands originates from there. Though there is a considerable risk of the generaliza-

tion of tuberculosis from the infected glands, in this situation the disease is not necessarily fatal. The children suffer from chronic ill-health, and from abdominal pains referred to the umbilical region, coming on at night and sometimes after food. The loss of appetite is often accompanied by disturbed bowel action, generally constipation. After a considerable experience in operating upon children presenting symptoms of this character the author states there are always found in these cases not only tuberculous mesenteric glands but also a somewhat dilated appendix, containing fecal material but otherwise not diseased. He accordingly removes the appendix in these patients, thereby obviating a great danger and source of discomfort from contractions on the fecal matter (appendicular colic). A fortnight or three weeks after operation the patient is sent away to a country home. In 9 cases out of 10 improvement is rapid and great. Shortly after the operation the appetite returns and the patient eats and digests with enjoyment articles of diet previously interdicted.

Concerning the nature of the infection in the tuberculous mesenteric glands the author is in doubt. Von Pirquet's test for bovine and human tuberculosis is usually negative, and from its varying results he is led to conclude that some of the infections are due to human tuberculosis, some to bovine tuberculosis, and some to both. The clinical indications in children with indigestions, abdominal pains and discomfort and perhaps colitis are, however, clear: Remove the appendix and begin sanatorium treatment a fortnight later.—Corner, in *The London Lancet*.

Urethane.

Upon trial of urethane (ethyl carbamate) in 50 cases in children the author has come to the conclusion that this drug is a reliable, harmless hypnotic which deserves to be employed in all conditions associated with nocturnal excitement in the young. In children 1 to 12 months old he finds doses of 0.5 to 1 Gm. ($7\frac{1}{2}$ to 15 grains) to be suitable; in children 1 to 2 years old the dose should be 2 Gm. (30 grains). Urethane readily dissolves in water, and can be given either by mouth or rectum without irritating the mucous membranes. Quiet sleep supervenes in ten to twenty minutes and lasts in most instances through the whole night. The pulse and respiration remain unchanged, and no untoward collateral effects were ever observed by the author. Occasionally children who were underweight were observed to require even larger doses than those corresponding to their age.

The drug was found by the author effective in various conditions associated with nervous excitement, in pain due to injuries or disease, and in infantile convulsions the result of gastrointestinal or cerebral disturbances. In doses of 2 to 3 Gm. by mouth or rectum, urethane was found valuable as a substitute for chloral hydrate. In whooping cough it was not observed to exert any influence upon the frequency and violence of the coughing spells, but proved valuable as a preventive of the nervous phenomena which appear after whooping-cough has run its course. Favorable results were also noted with the drug in latent or manifest spasmophilia, in chorea, and in postpneumonic delirium.—Berling, in *The Berliner klinische Wochenschrift*.

Vomiting of Pregnancy.

The author found in 4 successive cases of the vomiting of pregnancy that the addition of a solution of ferric chloride to the patient's urine caused it to develop a portwine color. This is the identical reaction commonly tested for in diabetic cases to determine the presence of beta-oxybutyric acid in the urine, and is generally known as Gerhardt's test. This reaction is not given by the urine either in normal pregnancy or in eclampsia. The intensity of the red color produced varies directly with the gravity of the condition, and the reaction is lost when the gastrointestinal functions return to normal. The test may be obscured by the formation of a precipitate of ferric hydroxide, but this confusing factor can be eliminated by filtering. Lead acetate, if perchance it is being employed, will also mask the reaction, combining with the iron salt to form a red compound.—Lorier, in *The C.-r. de la Societe de Biologie*.

Psoriasis and Lichen Planus.

The use of the following emulsion of tar is advocated by the authors in psoriasis: Oil of cade, 50 Gm. (1½ ounces); black soap, 25 Gm. (6 drams); water, 50 Gm. (1½ ounces). Yolk of egg and a little fluidextract of quillaja may with advantage be added to improve the emulsion. This preparation is added to the baths given for the removal of the scales. The patient is ordered to soak in the bath and rub the patches for ten or fifteen minutes.

All emulsions of tar, according to the experience of the authors, are more active than ordinary tar baths. A great advantage of the tar emulsion baths is that they are non-irritating. They should be administered daily. A small amount, such as 2 Gm. (30 grains), of chrysarobin may be added to the preparation, its effects being

rendered somewhat milder by the tar. The patient is directed to apply petrolatum to the patches in the daytime, then take the bath, and reapply petrolatum at night. Any redness following the treatment indicates that the bath should be made weaker. Tar folliculitis is treated by the application of methylene blue. Occasionally pyrogallol to the amount of 1 or 2 Gm. (15 or 30 grains) was added to the baths, the urine being carefully watched as a precautionary measure.

In 8 cases recently treated with the oily tar emulsion baths the itching was observed promptly to subside, and the skin was left smooth and supple. In a severe case of lichen planus, associated with the development of bullæ, the baths also gave excellent results.—Balzer, Godlewski, and Condat, in *The Bulletin de la Societe Francaise de Dermatologie et de Syphiligraphie*.

Pulmonary and Hepatic Abscess.

The case is reported of a boy of 14 who had coughed up pus night and day for five years, the amount evacuated in the twenty-four hours averaging about a teacupful. He was stunted in growth, and the parents had given up hope of cure. From the character of the pus, the practically aseptic condition and the physical signs, the author diagnosed liver abscess with perforation of the diaphragm and pleura and secondary abscess in the base of the lung, with adhesion of lung, liver and pleura to the diaphragm in the neighborhood of the perforation, and with intermittent partial evacuation of the cavities in the liver and lung via the bronchi and trachea.

There being little hope of healing under these conditions, the force of gravity preventing complete evacuation of so complicated a cavity at such a hydrostatic depth by the simple act of coughing, the author began treatment by inverting the patient, when at once a quantity of pus was evacuated greater by far than had been previously removed by any one spasm of coughing. Thereafter the treatment consisted in having the boy hang over the edge of a table, head down, the body being suspended vertically while the legs and thighs lay on the table at right angles to the trunk, thus supporting him. In this position he was made to cough and squeeze his chest until no more pus came out. By this means the abscess cavity was completely emptied, and he was made to repeat the process 5 or 6 times a day. The amount of pus evacuated rapidly diminished, and in about six weeks the boy ceased to bring up and was cured. Subsequent progress, mental as well as physical, was remarkable.

It is therefore suggested that this postural

method of treatment be tried in abscess of the lung and bronchiectasis before resorting to surgical procedures.—McKechnie, in *The London Lancet*.

Testimonials to Character and the Law.

A case which has been reported in the newspapers draws attention to a matter which the employer who is asked to give a character should bear in mind. A man whose name was given as a reference stated that an assistant who had been in his employment for three years was honest and a good worker. On this recommendation the assistant obtained a new situation. He turned out to be dishonest. His new employer brought an action for damages against the "reference." It was apparently proved at the hearing that when he gave the character the defendant knew that another employer had alleged dishonesty against the man, but did not reveal this fact. He had to pay £21 damages. A case of this kind emphasizes the necessity for absolute candour when giving a character. The giving and "taking up" of references are things of daily occurrence at every large hospital. When there is nothing but good to be said of a nurse or a servant, it is a pleasure to write a character. It is otherwise when the conduct of the party seeking a note of commendation has been unsatisfactory.

Omitting the method unsuccessfully adopted in the above case, there are two ways of escape. A character may be refused or may be made colorless; but to give a character which is wholly colorless is almost as prejudicial to the employee as refusal to give any character at all. Moreover it is doubtful whether any one can ever be justified in refusing to state all he knows about persons who are seeking employment at a hospital. Having regard to these considerations, it is important to notice that the law affords considerable protection to him who is asked to give a character. No action for libel or slander can be founded on a character, provided the person who gives it is not actuated by malice. According to Dr. Odgers in his *Law of Libel and Slander*: "A duty is cast upon the former master to state fully and honestly all that he knows either for or against the servant, and any communication made in the performance of this duty is clearly privileged for the sake of the common convenience of society, even though it should turn out that the former master was mistaken in some of his statements." But if the master, knowing that the servant deserves a good character, yet, having some grudge against him, or from some other malicious motive, deliberately states what he knows to be false and

gives his late servant a bad character, then such a communication is not a performance of the duty and therefore is not privileged. There is, in fact, in such a case, evidence of malice which takes the case out of privilege." It is well to bear in mind that a letter written by an employer to retract a favorable character given previously will also be privileged.—*The Hospital*, London.

Fractures and Separations of the Epiphysis in Children.

Savariaud has found evidences of the consolidation of intrauterine fractures in new born children. Fractures are much more frequent than dislocations in children. They consolidate very quickly, and in the frequent greenstick fractures the child may use the limb for some time after the partial fracture has taken place, and the diagnosis may be made only when the exuberant callus is present. Rachitis and prolonged immobilization of the limbs in plaster act as predisposing causes of fracture, since there is absorption of bone in them. Separation of the diaphysis and epiphysis occurred frequently since there is a zone of imperfect ossification at the point of least resistance. A violent distortion of the ligaments occurs, and the periosteum remains attached to the epiphysis that is being separated from the diaphysis. If complete reduction does not occur there will be formed a band of constriction due to rapid ossification at this point which will cause an arrest of development of the bone.—*Journal de Medecine de Paris*.

Value of the Wassermann Reaction in a General Medical Service.

O. Weill (*Journal Medical de Bruxelles*) tested all the patients who entered his medical service during six months with the Wassermann reaction. None of these patients came in on account of florid syphilis, and all syphilitic cases were supposed to have been sent to another clinic. The patients tested were 225 in number; of these 64 reacted positively to the Wassermann test, that is 28.44 per cent. After the positive test they were carefully questioned as to their previous illnesses, and in all cases they admitted having had syphilis. There were among these patients cases of visceral sclerosis, diabetes, bronchial dilatation, aortic dilatation, neoplasms, icterus, cerebral hæmorrhage and softening tabes, general paresis, amyotrophic lateral sclerosis, Jacksonian epilepsy, meningomyelitis, and other nervous phenomena. The author's results give a valuable demonstration of the value of the Wassermann reaction in general medicine. This reaction allows one to

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recognize many cases of syphilis that would not be otherwise detected, and to treat them properly. It shows the terribly disastrous effects of the disease and the profound mental and normal decay that it causes. Nearly all the nervous maladies of organic form seem to be due to syphilis.

Prolonged Priapism.

Billaud relates a case of this nature. The patient was a farm servant aged 26, who had been married a month. There were no pathological antecedents, although the man was of a nervous temperament. Up to the time of entry into hospital the state of priapism had lasted for seventeen days. The condition had commenced suddenly without apparent reason, and the turgescence and rigidity extended to the spongy tissue of the organ as well as the corpora cavernosa. No medical treatment had been of any value. Cold and hot applications and compresses, leeches to the root of the penis and applied to the lumbar region, were equally unavailing. Bromides, morphine, and chloral had only the effect of making him drowsy. They had no local action. Sexual intercourse was out of the question, as introitus became impossible owing to the size and wooden hardness of the organ. Masturbation resulted only in making the continuous pain more severe. The weight of his clothes, the least movement, became insupportable. He passed urine normally and without pain, and this indeed was his sole relief. An anæsthetic having been administered and a gum-elastic catheter placed in the urethra, two parallel incisions—each corresponding to a corpus cavernosum—were made. A quantity of black viscid blood immediately escaped, and the organ subsided. The next day, after a good night, the patient suffered no further pain. There was still some œdema, however, and hot fomentations were applied. The wound practically healed by first intention, and a few days later was only slightly swollen. The patient left hospital after twenty days and up to the time of leaving had had no erection; the author is unable to say when erection occurred again. He suggested that the man's neurotic predisposition may have contributed to the condition, but is unable otherwise to account for it.—British Medical Journal.

Professor Archinard.

Paul Emile Archinard, A.B., M.D., Professor of Nervous Diseases in both the Undergraduate and the Postgraduate Medical Departments of the Tulane University; bacteriologist of the Louisiana State Board of Health and of the Board of Health of the

City of New Orleans, died at the age of 53, in New Orleans, his native city, on August 23, after a prolonged illness, which he bore with most extraordinary fortitude and determination.

His was a fruitful life. As a physician, a teacher, a citizen—as a man, every inch of him, he did his full part, and did it well. A mere mention of the various positions he held at different times, and the bodies in which he obtained membership, would occupy much space, and, as this is no attempt at biography, it will suffice to say that he filled the positions more than creditably and took a prominent place in the societies to which he belonged.

Endowed with a large degree of intellect, together with the capacity and willingness to work, he was prepared to profit, during his early days as a hospital student and a young doctor, by the teachings of Schmidt in pathology and bacteriology, of Lemonnier in medico-legal lore, and, later, by his training under Pasteur, Koch and Charcot. He became an eminent pathologist and bacteriologist, most of his writings being along that line, including his text-book on "Microscopy and Bacteriology," which is highly thought of and enjoys the distinction of having been translated into Chinese. His conscientious studies, inherent common sense, and unusually good judgment combined to make him an efficient and beloved practitioner, and, when he limited his field, an expert and authority in neurology, which branch he taught with much success.

His main characteristic was his indomitable will. His mind once made up, nothing could change it; no power on earth could swerve him from his course.—New Orleans Medical Journal.

By-Effects from Salvarsan in Syphilis.

Mucha reports, from the clinic for skin and general diseases at Vienna, in charge of Finger, forty-four cases of neuro recurrences in 500 syphilitics given salvarsan treatment. He describes them in detail, commenting that the disturbances involving the auditory nerve since salvarsan has been introduced far outnumber all the cases that have been reported in international literature during the last twenty years. The fact that continuing the treatment sometimes cures the auditory disturbances sustains the assumption that the salvarsan injures the nerve in question, thus inducing a point of lesser resistance where the syphilis virus makes its influence felt more intensely. When the auditory disturbances subside spontaneously, or persist rebellious to renewed treatment of the syphilis, the assumption seems plausible that the trouble was predominantly the result of the toxic action

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of the arsenic, and that after elimination of the drug the changes were so slight that complete restitution followed, or so severe that this was no longer possible. An argument in favor of this view is the benefit obtained in two cases by sweats and injection of pilocarpin to promote elimination of the arsenic, without further specific treatment. There is still a further possibility, namely, that the salvarsan may have sensitized the syphilitic virus. In his experience there were eighteen cases of neuro recurrences in the ear, in which the interval since infection was only six to twelve months. The neuro recurrences were observed with both subcutaneous, intramuscular and intravenous injection of the salvarsan. In conclusion, Mucha reiterates that the so-called neuro recurrences are serious matters for the patient and frequently entail permanent injury, and the patients seldom care for further medication.

Mucha's material includes, besides the eighteen ear cases, six with general toxic phenomena, digestive disturbances, intense headache and dizziness; six with disturbances in other cerebral nerves, four with epileptiform attacks, two with cerebrospinal phenomena, five with optic neuritis, one with optic neuritis plus cerebral hemorrhage, leaving motor and mental disturb-

ances; one case of fatal meningo-encephalitis, three cases of non-syphilitic meningitis, seemingly aggravated by salvarsan, and a case of nephritis for which he thinks salvarsan was evidently responsible, as distinct traces of arsenic were perceptible in the urine nine months after the intragluteal injection of salvarsan, and the nephritis showed great improvement under sweating procedures.—Wien. Klin. Wochen.

Action of Fibrolysin.

Mendel writes that fibrolysin has an elective action upon all newly formed connective tissue, and that it will stimulate the absorption of all inflammatory exudates and prevent the contraction of scars by increasing the elasticity of the scar tissue. Besides scars proper, all adhesions, thickenings and contractures are favorably influenced. It has also been recommended in endocarditis, meningitis, arthritis, teudovaginitis and keratitis and in interstitial processes in the liver, kidneys, myocardium and the central nervous system. More recently, fibrolysin has been given prophylactically, to prevent the formation of fibrous tissue after injections of salvarsan and some advise the use of the drug before salvarsan is injected so as to soften the foci containing the specific germs. The

drug is preferably injected intramuscularly; these injections cause only slight inconvenience, particularly if the solution is warmed. General symptoms are a slight odor of garlic on the breath, an increased flow of urine and a leucocytosis. Rarely, patients will react with headache, vertigo and general lassitude which rapidly pass. Sometimes there are symptoms of anaphylaxis (fever eruption, vomiting and more marked local reaction). Every new injection will cause the same symptoms, even if months have elapsed since the last injection and very small doses only are given. Here the therapeutic effect is particularly pronounced. Where fibrolysin cannot be injected, it may be given by suppository locally in the form of a plaster.—Therap. d. Gegenwart.

Systolic Blood Pressure in Heart Disease.

The observations recorded by Korke were made on patients suffering from (1) simple, uncomplicated valvular lesions of the heart due to acute rheumatic endocarditis; (2) valvular lesions due to other causes; and (3) other heart affections. No systemic complications were observed in cases of valvular lesions due to rheumatic endocarditis. There were no cyanosis, dyspnea, changes in the fundus oculi, febrile temperature and albuminuria, though traces of albumin were sometimes detected in a few cases. The observations were made on patients of both sexes, of different ages. They were allowed a mild out-door exercise, and generally they were keeping in good health. The apparatus used for the observations was a sphygmomanometer, a Martin's modification of Riva-Rocci. The systolic blood pressure was recorded by the armlet method during the recumbent posture of the patients. The observations were made daily, under similar circumstances, nearly an hour before dinner (at 1 p. m.), and in cases of doubt they were repeated two to three hours after 8 p. m. A record of pulse rate and number of respirations was kept during the observations, and sphygmographic tracings of the pulse were often made to note the effect of blood pressure on the pulse. In valvular lesions of the heart (with or without complications), due to rheumatic endocarditis and other causes, the blood pressure was found to be normal or above normal. In simple and uncomplicated valvular lesions of the heart, due to acute rheumatic endocarditis, the blood pressure was found always to be normal or above normal. In aortic incompetence, complicated with anginal attacks, the blood pressure was found to be subnormal during the interparoxysmal periods. As to the

significance of high blood pressure in simple and uncomplicated valvular lesions of the heart due to rheumatic endocarditis? The high blood pressure observed in some of the cases is, Korke believes, a physiologic compensation in those individuals, though it may be mistaken for a pathologic state. The blood pressure in cardiac muscle failure was normal, as well as above normal. In valvular lesions, complicated with chronic nephritis and arteriosclerosis, the significance of supernormal blood pressure requires no comment. It is distinctly pathologic.—London Lancet.

The Paths of Rheumatic Infection in Children and Their Protection.—Mackenzie (British Medical Journal) says that the importance of protection from local and general infection cannot be exaggerated, and the time has come when the mind of the profession, and more particularly the general practitioner, must turn to the possibility not only of treating rheumatic phenomena in children early, but of preventing their occurrence.

Hypertrophied adenoid tissue in the throat and nasopharynx should be removed in the quiescent stage, and simple congestion of the pharynx, palate, and fauces in a child with a rheumatic family or previous history, or with a rheumatic facies should always be looked upon seriously, and met with local applications of salicylic acid preparations, together with sodium bicarbonate, sodium salicylate, potassium chlorate, and aperients. A 5 to 10 per cent. of sodium salicylate applied to the tonsils, palate, and pharynx gives a protective film from further contamination, and does not impair the defensive action of the tissues; or a gargle containing 20 to 40 grains to the ounce is equally efficacious. Care should be taken that decayed teeth are stopped or extracted, and the tooth-brush and antiseptic powder should be insisted upon daily.

Inhalation for half an hour, three times a day, of 10 minims of a solution of equal parts of creosote and carbolic acid with a Burney-Yeo inhaler is, Mackenzie believes, the best method of protecting the pulmonary mucous membrane.

The Dr's. experience is that sodium salicylate combined with sodium bicarbonate and rhubarb powder is by far the best protective treatment in cases in which there is any indication of excess of mucus in the intestine, the alkali acting as a solvent, the rhubarb clearing the offending material away, and the salicylate acting as a sedative and healing agent to the mucous membrane.

His conclusions are as follows:

1. The micrococcus rheumaticus takes

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the path of least resistance.

2. This may be an unhealthy throat, absorption from which frequently gives rise to general rheumatic infection, including peritonitis and appendicitis, directly through the vascular system.

3. Or it may be localized in the bronchial tubes and give rise to pneumonia, with polyarthritis and endocarditis.

3. An unhealthy condition of the intestinal wall may excite to activity the rheumatic agent, setting up acute rheumatic phenomena with peritonitis or appendicitis as part of a general infection.

5. A mild catarrh is produced at the seat of inoculation, and one or more of three factors in each case are present and promote the inroads of the micrococcus. Either (a) the physical resistance, or (b) the protective properties of the local tissue, or (c) defensive agencies of the blood, are below par.

6. The distinction between acute and subacute or latent rheumatism is mainly due to general infection with the actual rheumatic agent in the former and with the toxins only in the latter.

Incarcerated Treitz Hernia.—Gobiet (Wiener klin. Wochenscl.) states in detail a case of incarcerated Treitz, or retroperitoneal, hernia successfully treated by operation. In this variety of hernia the protrusion takes place in the recessus duodenojejunalis. This recess is bounded by Treitz' ligament. It is very characteristic of this hernia that the lower mesenteric vein courses in the free margin of the anterior wall of the peritoneal pouch. The treatment is always operative, and from his previous experience the author concludes that slight degrees of incarceration can usually be relieved by simple traction upon the prolapsed gut. In rare instances where a firm constriction of the intestine is present, it is usually necessary to ligate the inferior mesenteric vein, although frequently it is thrombosed. As a vital indication ligation even of the intact vessel may be required if the intestine cannot be freed in any other way. The only reliable radical operation consists in splitting the hernial sac outwardly from the ring and then removing the anterior wall. If the vein is thrombosed there is no obstacle to this procedure. If, however, it

is intact, the vein should not be interfered with, the open sac being stitched to the abdominal wound and drained.

Enterostomy as a Lifesaving Measure in Peritonitis and Intestinal Occlusions.

—Krogius (*Deut. Zeitschrift f. Chir.*) says that during a period of almost ten years enterostomy has been done in 107 cases operated upon for various abdominal affections in the Surgical Clinic of Helsingfors. The object of the procedure was to establish a temporary fistula for the removal of stagnating intestinal contents, thus preventing threatening death from obstruction. In 37 cases enterostomy was resorted to as a primary measure, with 13 cures, and in 70 cases as a secondary procedure a few days after the first operation, with recovery in 23. In 42 cases the condition was one of peritonitis originating in the vermiform appendix and in 35 cases intestinal occlusion was present. To be effective the enterostomy must be done above the site of obstruction of the bowel, usually in the small intestine. A cecal fistula can prove useful only in case of obstruction of the large intestine. By adopting the Witzel method the fistula can be established high up in the small intestine without any risk of resulting inanition.

Anomalous Oedema.—Langmead (*Proc. Roy. Soc. of Medicine*) describes the case of a girl, aged 18, who since the age of 12 had suffered from unexplained oedema. It began in both legs, the left being first affected. This leg had been encased in plaster of Paris at that time, and afterwards put up in a Thomas knee splint. There is no history of any reason for this special method of treatment. When the plaster was removed the swelling recurred, and then a similar swelling appeared in the other leg. The ankles were first affected. She came under Langmead's observation in March, 1910, for a similar condition of the hands, at first in the left and shortly afterwards in the right. In the hands the swelling started on the dorsal aspects. The condition then found has persisted, but fluctuates considerably in intensity. Symmetrical oedema of all four limbs is present, accompanied by blueness, coldness, and sweating. The oedema is most marked in the legs, and usually is confined below the knees, but has extended above on one or two occasions. Sometimes pitting cannot be obtained by pressure, at other times firm pressure causes it. As in the legs, so also in the arms, the oedema is most pronounced at the distal extremities. It lessens if the parts are raised, and increases if they are allowed to hang down. It is almost or completely absent in the morning, but gradually increases during the day, especially if

the patient stands much. The dependent position of the arms during a washing day is always followed by considerable swelling of the hands. The blueness is intensified by cold, to which she is very susceptible, but no sequence of events as occurs in Raynaud's disease was detectable. No redness, throbbing, or moving (suggestive of erythromelalgia) has been noted. The hands and feet are always clammy, not infrequently beads of sweat standing out from the skin, and are cold at the same time. Recently she has complained of swelling of the cheeks after meals, which subsides in an hour or two. She is very prone to septic sores. Any slight injury produces a sore which weeps clear fluid freely, and a sodden, indolent ulcer results, which heals with difficulty. Reddish-purple swellings have occurred occasionally in the oedematous regions, looking like chronic abscesses. A few of these were suppurated, but the majority subsided. On one occasion staphylococcus aureus, and on another a streptococcus was isolated from the discharge. There was no sign of heart or kidney disease. The blood count was normal. The patient's general health was good. She did her work as a general servant without trouble until the evening, when the swelling of her hands and feet caused her difficulty in holding small objects (such as a needle) and in walking. She is an only child, and no history of any similar affection in the family could be elicited. The only treatment which has been found beneficial is the use of elastic stockings. Thyroid extract has made no difference. In discussing the case, Sir W. Osler thought the fact that the oedema never disappeared excluded the case from the group of angioneurotic oedema. The case was anomalous in his experience; it looked more like the condition which Charcot described as "blue oedema."

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Cyclical Vomiting—Langmead, in *The London Practitioner*, does not refer by this term to any variety of vomiting that recurs at fairly regular intervals irrespective of its cause, but to a particular condition associated with vomiting which has also been called fitful, periodical, and recurrent. It occurs more often in girls than in boys, usually between the ages of five and eight years. The patient is generally of a pro-

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nounced neurotic type. For a few days before the onset the child is fretful, peevish, refuses food, mopes about the house, is drowsy, or complains of headache and nausea. The tongue is coated, the breath offensive, with the sweetish heavy odor characteristic of acetone. Constipation usually precedes, but sometimes there is instead an offensive diarrhea. The temperature is slightly raised, to 100° or 101° F., occasionally higher. The urine is diminished and contains the acetone series of bodies. The most important and constant feature is vomiting, which is usually very distressing and recurs every few minutes in the worst cases. Expulsion of the contents of the stomach affords no relief. After twenty-four or thirty-six hours the vomit is often brownish in color from the presence of altered blood, but it hardly ever appears as "coffee grounds." In mild cases the vomiting lasts only a day or two, but the longest attack recorded lasted seven weeks. Pain in abdomen appears during the attack as the result of vomiting. The cheeks are flushed, the eyes, bright at first, become sunken, glazed, and injected. The skin is dry and flushed, the abdominal wall becomes concave. The child becomes very emaciated and restless. Symptoms ascribed to acid intoxication, resembling those of diabetic coma, form an important part of the picture. Drowsiness is present and increases as long as the vomiting persists, leading in fatal cases to coma. The urine contains acetone, diacetic acid, and beta-oxybutyric acid, but no sugar. Neither albumin nor casts are found in great quantity. Thirst is great. The temperature is slightly raised and the pulse rate is increased. No objective signs of visceral disease can be found, except perhaps enlargement of the liver. The conditions from which this one has to be differentiated are meningitis, intestinal obstruction, nervous and hysterical vomiting. Meningitis is productive of more severe headache, in it the vomiting is less frequent and of an explosive character, the symptoms of acid poisoning are not so prominent, and the mental change is more profound. Intestinal obstruction is usually to be excluded by the absence of local signs, but the mistake is often made. It is of extreme importance to make a careful differentiation, because if a patient with cyclical vomiting is operated upon, a fatal issue is almost certain. Nervous and hysterical vomiting are without distress and not periodical. It is questionable whether the bilious attack to which children are prone is not a miniature attack of cyclical vomiting which begins more abruptly and ends more quickly. The prognosis seems to be pretty good, only eleven

fatal cases being known. Six of these patients were examined post mortem, and fatty degeneration of the liver was found in five. In the other hypertrophic stenosis of the pylorus and some purulent bronchopneumonia were found, which render it doubtful if this was a true case of cyclical vomiting. The cause is obscure. The essential point of treatment between attacks is to obtain a satisfactory daily evacuation of the bowels. The regular use of small doses of alkalies seems to be beneficial. During the attack attention should be given to dilution and elimination of the poison. A brisk purgative should be administered, an intravenous saline if drowsiness increases, and drinks of warm water to dilute the toxins and aid in their elimination as it is expelled from the stomach.

The Diagnosis of Bowel Cancer.—Paul (The London Practitioner) in the annual address on surgery before the 1912 meeting of the British Medical Association discussed intestinal surgery in general and drew attention to the fact that unfortunately we are still without means for recognizing cancer of the bowel in its really early stages. In fact, it sets up no symptoms at this period of its growth which would lead a patient to consult his doctor, except when low down in the rectum. Here it excites irritability, and attracts attention by the presence of blood and mucus, and so often allows an early diagnosis; but higher up we have almost invariably to wait until the growth has begun to impede the passage of feces before the patient is sufficiently alarmed to seek advice. Large ulcers without marked obstruction are chiefly characterized by intestinal toxemia, with elevation of the temperature, flatulent dyspepsia, loss of flesh, irregular colic with constipation or diarrhea and mucus and blood in the motions—visible when the growth is low down, occult when higher up. A tumor may frequently be felt. The ring stricture usually causes less disturbance to the general health, but more colic and more obstruction. X-ray screen view of the behavior of a bismuth meal is useful if its limitations are recognized. It may inform us as to the site and the amount of constriction, though in regard to the latter atony or tonicity of the bowel must be taken into consideration. In no circumstances can it indicate either the extent or the malignancy of the growth, nor can the ready passage of a bismuth meal be regarded as a contra-indication to operation. If the disease is within the reach of the sigmoidoscope this treatment may be of considerable assistance in the diagnosis of growths situated in the pelvic colon, where they frequently escape touch when examined either by the rectum or the abdomen.

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The Southern Medical Association

Will hold its annual convention in Jacksonville, Fla. on October 12 to 14, 1912, under the presidency of Dr. J. M. Jackson of Miami, Fla.

The Heart Sounds of Sick and Healthy Children

Schlieps states that in older children suffering from severe forms of infectious disease the first sound of the heart becomes inaudible. The relaxed condition of the skeletal musculature suggests a similar condition of the heart muscle. The softening of one heart sound at the same time that the blood pressure remains normal indicates that it is the first sound that is muffled. The remaining audible tone is louder over the pulmonic area than at the apex. The administration of camphor causes both tones to become more distinct, even in cases with a normal blood pressure.—*Monatsschrift für Kinderheilkunde*,

Purpura in Infective Diarrhea.—Rollston and Molony (British Journal of Children's Diseases,) have found, among 100 cases of severe infective diarrhea, purpura present in 11 children. All but 2 of the cases were under eleven months of age, and in all there was a fatal issue. The rash occurred on the trunk, and, in contradistinction to ordinary purpura was not present on the extremities. The presence of purpura apparently bore no relation to treatment by infusion or the administration of serum. The authors conclude from the analysis of these 100 cases: (1) Symptomatic purpura in infective diarrhea mainly occurs on the abdomen and chest of infants under the age of one year, (2) It is usually a terminal phenomenon in prolonged cases. (3) The prognosis in these cases is extremely grave.—

Sodium Salicylate as an antiseptic.

Sapojkov has recently drawn attention to the efficacy of sodium salicylate as an antiseptic dressing in cases of furunculosis and anthrax. To obtain the full benefit of the drug it is necessary that the affected part be denuded of epithelium, if this is not already the case. To that end he gently scarifies the skin round the furuncle and then applies the drug freely in a finely powdered condition to the denuded area. Within twenty-four hours excellent results are obtained, pus being freely discharged from the furuncle, and only slight pressure is necessary to cause the exit of the comedo from the deeper tissues. The author considers this method superior to that of Bier because of its simplicity and because it can be applied to all parts of the body. The only drawback to its use lies in the fact a sharp burning pain is experienced when it is applied to the denuded surface. He has made use of the drug as an insufflation in cases of tonsillitis, but reports that its disagreeable taste often induces patients to refuse to undergo a systematic course of treatment. When patients can be induced to persevere, the results in such cases are excellent.—The Hospital, London.

Treatment of Pain in Tuberculosis.—

Paullard, (Progres) advises the use of subcutaneous injections of boiled water in tuberculosis or other affections. He has given several hundred injections of this kind, and finds that the procedure may be depended upon in all cases to give relief within one hour, provided that the injection is made exactly at the point where most pain is elicited by palpation. The discomfort caused by the injection itself is very slight. Not more than one or two c. c. of water should be injected. Generally the pain does not return for several days to a week, or even longer. Occasionally it does not reappear at all. In other instances the injection should be repeated. That the effect of this measure is not a psychic one is indicated by the recent experiments of Surmont and Dubus, who showed in rabbits that injection of distilled water in the vicinity of the sciatic nerve brings about edema of the nerve, with infiltration of fluid between and around the fasciculi and sometimes congregation of leucocytes locally.

The Specific Treatment of Infections, with Especial Reference to Epidemic Meningitis.—Flexner and Simon (Edinburgh Medical Journal), report one thousand and three hundred cases of epidemic meningitis treated with Flexner's antimeningitis serum. Including patients of all ages and

in varying stages of the disease the mortality was 30 per cent. In 199 cases in which serum was injected within the first three days of illness the mortality was 18 per cent.; 346 injected from the fourth to seventh day, mortality 27 per cent; 666 injected later than the seventh day, mortality 36 per cent. Of 125 infants below one year of age, 63 cases recovered and 62 died. There were 21 infants injected within the first seven days of illness, with 17 recoveries and 4 deaths. There were 5 infants injected within the first three days of illness; all recovered. There were 104 cases which came under the treatment at some period later than the seventh day, among which 46 recovered. The age period between two and five years appears to be more favorable to recovery; 201 cases in this age period showed a mortality of 15 per cent.; when injected before the seventh day the mortality was 10 per cent.; when injected after the seventh day, 20 per cent. In 203 cases over twenty years of age the mortality was 39 per cent.

The average duration of the disease in cases that recover was eleven days in serum-treated patients, and four weeks in patients treated without serum. Thirty per cent. of the cases terminate by crisis. Although three times as many persons now recover from the disease as did formerly, the number of permanent sequels among the serum-treated cases is small. Deafness, either partial or complete, has been the one serious complication noted. Blindness, paralysis and impaired mentality have either not occurred at all or so rarely as to be negligible as factors.

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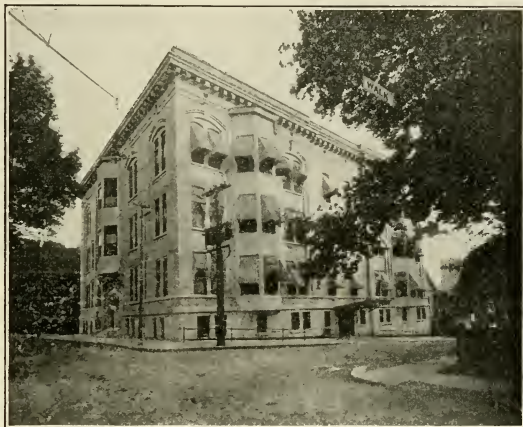
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All specimens should be accompanied by a brief note descriptive of the clinical condition and a special reference to the character of the examination desired.



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The name and address of the person to whom the report is to be sent should be clearly indicated.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test.

— After carefully washing, prick the lobule of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and allowed to dry without being spread out on the surface of the slide. After they have dried, the

allowed to dry without being spread out on the surface of the slide. After they have dried, the

slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—

Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count, etc., should be sent to the laboratory on glass slides. As thin a smear as possible should be made.

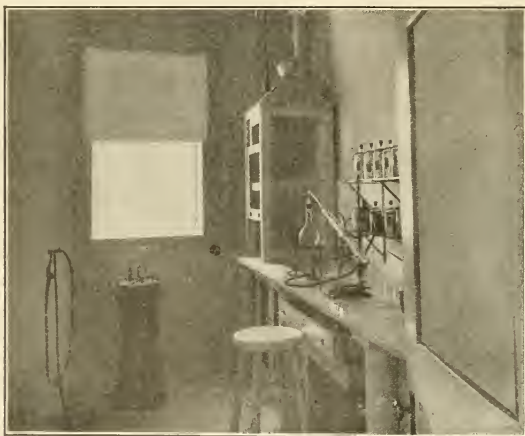
Smears For The Detection of Gonococci.—

One drop of purulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made over the surface of the slide.

In collecting a specimen from a female patient, care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.



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Clinical Laboratory, Showing Autoclave, Hood, Operating Tables, Etc.

operation or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiled paper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and the material from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in the bottom of the jar before

Urine.—for bacteriological examination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlich's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Pathological.—

material from either op-

the tumoris dropped in.

Feces.—should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

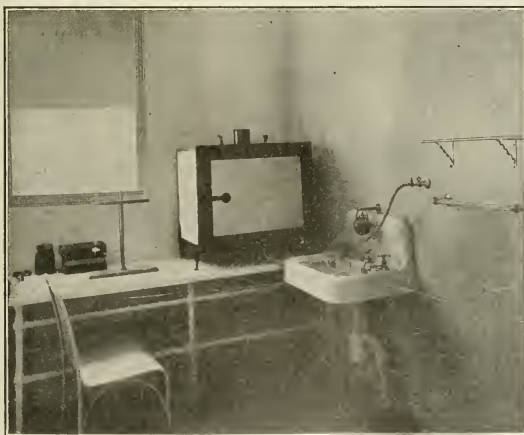
Wassermann's Test.—Since the advent of the discovery of 606 for the cure of Syphilis, the employment of the Wasserman test, both before and after its use, is conceded by all scientific investigators to be of the highest importance as a control to the curative effect of this remedy. The Charlotte Sanatorium Laboratory is specially equipped for carrying out this Wasserman Sero-diagnosis test for Syphilis.



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Specimens sent to the laboratory for this test should be obtained as follows.

1st. By using an ordinary antitoxin syringe, and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourniquet applied, taken the blood from the vein by means of the syringe



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to coagulate, cork, pack and mail as any other fragile package. At least two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.—The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.—should be sent in a sterilized bottle. A large vaseline or quinine bottle usually answers the purpose.

2nd. By means of capillary attraction, as illustrated in Fig. 11 represents empty capsule; tourniquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tube, allow



Fig I



Fig II.

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Widal Test..... 2.50
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Bacterial 5:00
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Chemical examination including alkalinity, chlorides, ammonia, nitrites and nitrates ...5.00
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out bad after-effects. Good results were also seen in epilepsy, post-apoplectic conditions, and the withdrawal of morphine. One patient only slept after 0.5 to 1.0 Gm. veronal; here the effect of 0.2 luminal was surprising. The after-effects of the drug are very slight, occasionally a sedative effect remains the day after which may be desirable. Where the drug must be given day after day, it is advised to discontinue it after 4 to 5 days for two days, and to give large amounts of water with sodium bicarbonate. Several patients took 0.4 Gm. daily for four weeks without any untoward symptoms. The pulse and respiration are not influenced and the urine remains normal, even where there was heart or kidney disease. In rare cases there may be an eruption.—*Neurolog. Centralblatt.*

Chineonal, A Combination of Quinine with Veronal.

Winternitz has frequently had occasion to combine quinine with veronal, especially where there was excitement or restlessness as a result of the fever. The slightly narcotic effect of quinine was considerably intensified by the addition of even small amounts of veronal. E. Merck has recently succeeded in chemically combining quinine with veronal to form a definite compound, containing about two parts of the former to one of the latter. This "chineonal" is a white, stable powder of decidedly bitter taste and may be used in several daily doses of from 0.6 to 0.75 Gm. It irritates the stomach less than quinine and possesses strongly anesthetic properties when insufflated into the eye. Patients with fever of any kind will complain less of pain and will rest more comfortably when taking chineonal. It also seems as if the bad after-effects of quinine are neutralized by the veronal. Chineonal is particularly indicated where ordinarily both drugs would be prescribed, as in neuralgias, pertussis and sea-sickness.—*Medizinische Klinik.*

Ergotin and Caffeine in Heart Disease.

In view of the pronounced effect exhibited by ergotin upon unstriated muscle tissue, L. Weile recommends a combination of this drug with caffeine in myocarditis, arteriosclerosis and cardiac neurosis. In a number of cases where there was marked intermittance of the pulse with vertigo, the author could diminish the frequency of these irregularities, and thus considerably improve the action of the heart, even where digitalis had little or no effect. In neurasthenic conditions of the heart, the nervous subjective symptoms rapidly disappear and there is generally a rapid gain in weight.

The combination may be injected subcutaneously or may be given internally in tablet form.—*Muench. med. Woch.*

Iodine in Obstetrics.

Charrier expounded recently, in a thesis, the excellent results obtained in the service of Dr. Bonnaire (a famous contemporary French obstetrician) from the use of iodine at the first appearance of puerperal infection and even when the infection had already gained a serious stage.

Tarnier is the first author who studied the effects of iodine in puerperal infection, and, in his work on antiseptics in the practice of obstetrics, he recommends a solution of iodine which has become known as Tarnier's solution (*liqueur de Tarnier*), and of which accoucheurs are making constant use. The formula for this solution is: Iodine, 3 Grams (grs. 45); potassium iodide, 6 Grams (grs. 90); boiled water, 1 liter (ozs. 32). This solution contains a relatively small quantity of iodine, and yet it is active in low-grade infections, owing to the very powerful properties of the iodine.

Iodine is in fact intensely diffusible, and volatilizes very rapidly in the uterine cavity, penetrating intimately and profoundly into its tissues. Iodine, in the form of the tincture, seems always to be highly beneficial, and its applications in obstetrics are many. First of all it is a preoperative antiseptic in such operations as symphyseotomy, perineorrhaphy, and so on. But most favorably is its action seen when it is used as a preventive.

Here is an example of how Dr. Bonnaire makes use of it. A woman is brought into his service with a miscarriage uncompleted. After trying the usual method to prevent the miscarriage, since the symptoms continue and the temperature does not rise, delivery is allowed to proceed spontaneously. If the delivery is incomplete, then the uterine cavity is cleared out by what in French is called a "*pince-mouchette de Bonnaire*," or else by digital curettage. Then immediately a sterilized compress [properly, a "pledget" of sterilized cotton] is taken up with a uterine dressing-forceps and moistened with tincture of iodine, and while the vaginal cavity is kept wide open and the uterine neck pulled down and held with a vulsellum, the iodine pledget is introduced into the cavity of the uterus and pushed in until the fundus is felt by the operator, when he touches alternately the two sides of the uterus and its two cornua. Quite as fully the same iodine treatment is indicated as a preventive in the case of artificial (instrumental) delivery.

Another indication for the preventive iodine treatment is when there is a delivery

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at term, but the child has died in the womb some days before. In a case like this, secondary fermentation ensues and anaerobic bacteria develop, of which the fetid amniotic liquor is proof. Further, there is the delivery before term of a macerated fetus. The delivery in such cases is bad, and the fetuses are nearly always congenitally syphilitic.

Up to now we have referred to the iodine treatment as a preventive. But the same treatment also furnishes the best results in puerperal infection, whether localized or general. In the first case, when a curetment is intended, then a quarter of an hour before the operation the uterine cavity is painted over with a strong solution of iodine, which can be done with a pledget of cotton held by a uterine dressing-forceps and dipped in the solution of iodine; this to be repeated two or three times, but always with greatest care.

In order to produce by the curettement the least possible traumatism, Dr. Bonnaire uses his "*pince-mouquette*," which detaches the debris adhering to the endometrium, but does not scrape the uterine surface, and he avoids opening the uterine sinuses; thus getting the best chances for success.

Finally, when there is fear of the appearance of a general puerperal infection, the painting over of the uterine cavity with iodine solution may prevent that complication.—*La Quinzaine Therapeutique*.

Zoophagus Insidians.

By the above name, which means "insidious animal eater," Sommerstorff designates a certain fungus belonging to the Phycomycetes, the same having been observed in a puddle near Gratwein, in Styria, in a basin of the botanic garden, Austria. According to the report of Matonschek, rotifera will remain laughing on the short filiform cells of the mother-fungus. They beat violently with the tail, but remain motionless when they cannot liberate themselves. The short filiform cell grows very rapidly through the mouth-opening into the interior of the animal. There a sucking organ, consisting of ramifying tubes, develops, and this brings about the absorption of the host's body. First there appear little oily drops in the captured animal, and these soon exhibit the Brownian (molecular) movements. The absorbed nutritive material promotes the growth of the long filiform cells. When larger rotifera (salpina) are caught, then the tubules growing through the animals assume peculiar forms, which may be presumed to denote a process of reproduction.—*Berliner Tageblatt*, in *Tharm. Zentrallh.*

Treatment of Gout by Phenyl-Chinolin-Carbonic Acid.

According to Weintraud (*Therapie der Gegenwart*) the chief point in the treatment of gout is the fight against uricæmia. Many things, notably colchicine, have been used, but Weintraud considers the chinolin-carbonic acids as the most effective and recommends the di-phenyl-chinolin-tetro-carbonic acid. Given in a dose of from 2 to 3 grms., this compound is capable, without altering diuresis or the excretion of the purin bases, of increasing three-fold in man the amount of uric acid eliminated. Taken during the acute stage—four doses of $2\frac{1}{2}$ gm. or three of 1 gm.—it brings about speedy relief of the pains, the articular swellings, the pyrexia, neuralgia, and digestive disturbances. It is equally effective in chronic gout, for in a daily dose of 2 or 3 grms. it reduces the tophi and improves the general condition. While under treatment the patients sometimes suffer from attacks of renal colic. These are due to the fact that the uric acid is increased to such an extent that it is not dissolved and is precipitated in the organism. This drawback is guarded against by prescribing alkalis with the object of increasing the solubility of the acid. Fifteen grms. should be given during the first twenty-four hours and 10 grms. in the succeeding days. It is useless to give alkaline mineral waters because they are not sufficiently effective.—*The Practitioner*, London.

The Value of Percussion of the Skull in Children.

G. Fiore (*Riv. di clin. Pediat.*). In a normal child from four to five years old six different zones may be distinguished, three above and three below a line drawn from the occipital protuberance to the frontal eminence, passing across the parietal eminence. The three upper and lower zones are marked out by two lines rising respectively from the posterior margin of the mastoid process and from about a centimetre behind the external angle of the orbit. The highest pitch is obtained in the upper medium zone, while the anterior and posterior give a lower pitch with a greater degree of resonance. The lower posterior zone gives a dull sound, sharp but hardly resonant; the middle a dull tympanitic sound, quite dull in its lowest part; the anterior a dull sound, slightly resonant. In older children above the age of six or seven years, owing to the presence of the frontal sinuses, the resonance of this region may be a little more marked. Over the mastoid process there may be a marked tympanitic resonance. The left half of the skull gives a note slightly more resonant than the right. Within

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these limits of age the modifications of the cranial sound vary with different individuals, but in normal cases a definite tympanic note of high pitch with a more or less metallic timbre is never present. In young infants whose bones are still soft the skull is little resonant, the note is dull, sharp and muffled, but in those a little older a high pitched and more resonant note is generally obtained. The thinness of the bones, the presence of the fontanelles and ununited sutures contribute to this result. The resonance is, in fact, greater in the neighborhood of the sutures and becomes less as the fontanelles close. But there is another factor which contributes in giving a clearer note in young infants—the larger amount of cerebrospinal fluid and the intra-

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cranial pressure, which is rather in excess of that which exists at a more advanced age. Contrary to the opinions of D'Astros and Pfaundler, Mya has clearly shown that in early life the cerebrospinal fluid is physiologically more abundant and escapes in a continuous stream, which indicates that there is greater pressure. Recently Francioni has confirmed this (Riv. di clin. Pediat., 1911, ix, p. 161). Hence the cranial percussion sound in children has a more tympanitic tone in the first two years of life and gradually diminishes. The difference between the various zones is less marked, or confused by the presence of fontanelles. The author gives his results obtained by percussion over the skull in cases of rickets, mongolism, achondroplasia, etc., for the details of which the paper must be consulted. He considers these results to be clear and important. By percussion a peculiar tympanitic resonance is elicited, which may assume various metallic tones up to the so-called cracked-pot sound; it may be diffused or localized. Such tympanitic resonance is in direct relation with the intracranial pressure and indicates its oscillations, but it may be also due to thinness of the bones of the vault of the skull and to widening of the sutures. Constant and marked in tuberculous meningitis in its earliest stages, often present, although in less degree, in purulent meningitis, feeble, though present, in encephalitis, absent in some forms of meningismus, it may furnish useful data for the differential diagnosis between these various affections, and between them and the vague nervous symptoms which in childhood so often complicate various infections and intoxications. Varying in direct relationship with changes in the amount of cerebrospinal fluid, in chronic hydrocephalus and in meningo-coccic meningitis, and generally in every case of intracranial hypertension, it may serve as a useful guide to the indications for lumbar puncture. In certain cases of tumor it may furnish important data for diagnosis and for localization.—Brit. Jour. Child. Dis.

Surgery of Cancer of the Cardia.

Parcelier points out the feasibility of radical intervention in cancer confined to the cardiac end of the stomach. It appears to have been well established that such tumors cannot be extirpated solely by the abdominal route. The abdominothoracic route, such as has been described by Janeway and Green, is the best, although for exploratory purposes alone laparotomy is sufficient. The thoracic stage in the operation must be conducted under differential pressure or with the aid of tracheal insufflation

anesthesia. The latter procedure enables one to secure immobility of the lung, which facilitates the various manipulations. An important point in this operation is that of drainage. The line of sutures closing up the opening in the stomach should be within the abdominal cavity. The diaphragmatic wound should be closed and the esophagus carefully fixed to the diaphragm. Drainage should be effected through the peritoneal cavity.—Archives Provinciales de Chirurgie.

Alopecia Universalis with Dystrophy of the Nails.

Sequeira reports the case of a sturdy boy, aged 4, whose mother stated that he was born with the usual amount of hair, but that when he was six weeks old the hair of the scalp, eyebrows, and the eyelashes came out, and since then the boy had been completely bald. Both parents were in good health and there was no history or evidence of syphilis. There were two other children; one has had rheumatism and the other has been quite healthy. There was no history of any similar affection of the hair and nails in any member of the family. There have been no miscarriages, and the patient was born at full term. The child presented the usual features of complete alopecia. All the nails of both hands and feet were narrow, laterally curved, and elevated from their beds at the distal extremities. Under the free margins there was a brownish-black horny mass. There were no other abnormalities. Thyroideum siccum in tablet form had been given, but, so far, without improvement.—Proceedings of the Royal Society of Medicine.

Treatment of Acute Tonsillitis.

According to the Gazette Medicale de Paris, September 13, 1911, Harold Hays recommends the following treatment: After having sprayed the throat with an alkaline antiseptic, in order to clear away the mucus, he proceeds to spray the throat with a one per cent. solution of cocaine and adrenalin 1-5000, applied especially in the tonsillar region. Finally the tonsils are touched with pure cocaine. In a few moments, the crypts are opened with a crayon of silver nitrate, 50 per cent., the caustic being retained in each crypt from ten to fifteen seconds. The patient is recommended to rest the following day and take a light diet, using pulverizations in the throat of a 50 per cent. solution of peroxide of hydrogen; at the same time to suck ice and to maintain a compress of cracked ice around the neck. Usually the tonsillitis clears up within twenty-four hours, although it may be necessary to repeat the treatment in some cases.—La Tribune Medicale.

"there is no surgeon of any experience who is not convinced of the soundness of the principal which underlies Bier's hyperemic treatment, and this being accepted there is every reason to discard the ice bag since the latter brings about a condition directly opposite to what we strive to accomplish in carrying out this principle in the treatment of inflammation involving the peritoneum." Dr. A. M. Fauntleroy, Surgeon, U. S. Navy, *Medical Record*, August 3rd.

Dr. Fauntleroy demonstrates that while the ice bag relieves pain by practically producing numbness as in a frost bitten toe or ear, it also decreases hyperemia, leucocytosis and encourages stasis in the part to which it is applied.

That heat is the direct antithesis of cold in encouraging favorable physiological action in inflammatory processes, whether superficial or peritoneal, here seems to be most logically and conclusively proven.

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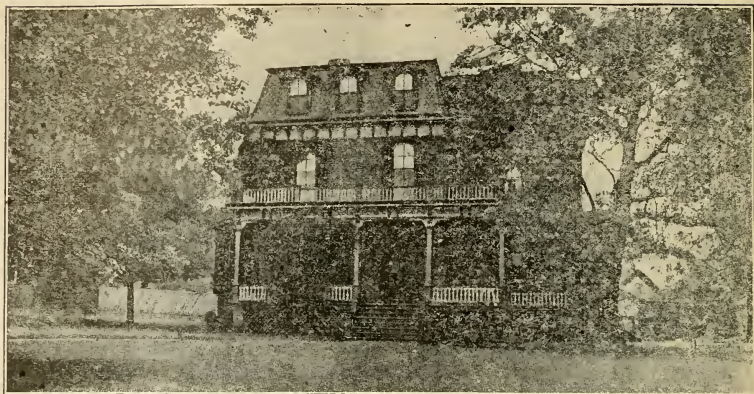


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The Charlotte Medical Journal

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CHARLOTTE, N. C., OCTOBER, 1912.

No. 4.

The Sources of Infection of Typhoid Fever.*

By Ennion G. Williams, M.D., Richmond, Va.,
State Commissioner of Health, Virginia.

No disease has occupied the attention of our medical societies to such an extent as has the subject of this symposium. While to the general practitioner the treatment of typhoid always furnishes the topic for an animated discussion, to the health officer the sources of typhoid infection is a theme of the greatest interest. It is to be hoped that soon the citizens of the country, other than the doctors and health officers, will take such an interest in the disease as its importance deserves; then, with the combined effort of the citizens, doctors and health officers, typhoid fever will be relegated to a place among medical curiosities and its records will be only a matter of history.

Theoretically, the prevalence of typhoid fever should be in direct proportion to the civilization of a country, because the very existence of typhoid is dependent upon the dissemination of human filth. Unfortunately, our country would take a low place among the nations if an estimate of our civilization were based on this health standard, for among the civilized nations of the world there is only one that has a higher rate of typhoid fever than has America, and that is Spain, as shown by the census of 1900.

However, fortunately our country is awakening to an appreciation of preventive medicine. We will soon no longer be in the class with our decadent rival Spain, if the comparative experience of two army camps in this country at thirteen years interval may be taken as evidence. One was the camp in Florida during the Spanish-American War, and the other was the recent camp of an army corps in Texas. Both lasted about four months in the summer season. The latitude of the two was about the same. In Florida there were 10,759 soldiers, and in Texas, 12,801. In Florida there were 2,693 cases of typhoid and 248 deaths. In the Texas camp there was only one case of typhoid and no deaths.

This victory on the part of the medical corps of our army should make the people of our country pause to consider the lives

that are now being sacrificed because our States and municipalities are not putting into practice well ascertained principles concerning the prevention of disease. It was estimated in the 1900 census that there were 35,000 deaths in the United States from typhoid fever and about 350,000 cases. In the State of Virginia during this past year there were about 13,000 cases and about 1,300 deaths. These figures are steadily declining as information about typhoid fever spreads among the people.

Typhoid fever is due to the invasion of the human body by a microscopic plant known as the bacillus typhosus, which, when it dies and disintegrates, gives up a poison that kills or injures certain body cells, giving rise to a disturbance of the normal functions of the organs and a consequent characteristic train of symptoms. The bacillus typhosus depends for its propagation upon organic matter, moisture and a temperature about that of the human body. It grows readily on most of the ordinary laboratory culture media. It readily succumbs to a temperature of 60° C. or 140° F. in a few minutes and may be easily killed by direct contact with the common chemical disinfectants.

It may remain alive for days, weeks and even months when dry and even when exposed to a freezing temperature. Although the organism may remain alive but dormant in these unfavorable surroundings, it will not multiply and sooner or later it will die. As soon as the live but dormant organism reaches a favorable environment it begins to multiply. The most favorable environment is that of the human body. For some reason, not understood, the bacillus typhosus will either not grow in the bodies of lower animals, or else if it does grow it does not injure the cells and so does not produce the characteristic symptoms of typhoid.

With the exception of milk, the human body may be looked upon as the only place in nature where the bacillus typhosus multiplies, and every bacillus typhosus may be said to come ultimately from the human body; therefore, every case of typhoid fever is caused by the bacilli that came from the body of a person suffering from typhoid or of a person harboring them.

The destructive influence of the bacillus typhosus is not due, as with many other bacilli, to a poisonous substance exuded or given out by the living bacillus, but is due to a poison within the bacillus itself, hence

*Read before the forty-second annual session of the Medical Society of Virginia, at Richmond, October 24-27, 1911, as a part of the Symposium on Typhoid Fever.

called an endotoxin. When the bacillus dies and its body disintegrates, then the poison is liberated and injures or destroys the human cells.

We thus understand that it is necessary that the bacilli must multiply and disintegrate before the symptoms appear.

The fact that the poison of the typhoid bacillus is an endotoxin and that the typhoid vaccine is simply dead bacilli, and consequently contains the same poison, should make it clear that the vaccine should be given only as a preventative and never as a curative agent. To give vaccine after a person has contracted the disease is but putting into the body the very same poison that is already injuring the body cells and can only result in increasing the damage and the severity of the symptoms.

The invading bacilli gain access to the human body through the mouth, being carried in usually on food and drink. Having reached the favorable environment furnished by the human body, they multiply very rapidly; some remain in the alimentary tract and leave in the intestinal discharges, others pass through the mucous membrane and enter the circulating blood. In the blood and in the intestinal discharges the bacilli may be found in great abundance, even several days before the symptoms of the disease necessitate the patient taking to bed.

As soon as the bacilli begin to multiply in the body, a mysterious reactive process begins by which the body attempts to destroy the invading organisms. The defensive substances thus formed are called anti-bodies. They cause the destruction and disintegration of the bacilli, liberating the endotoxin, which attacks and injures the normal cells and produces the consequent characteristic symptom-complex. As we would therefore expect, the greatest number of bacilli are found in the blood in the first week of the disease and they diminish as the disease progresses. This is also true of the bacilli in the intestinal discharges. The bacilli are also more abundant in the mouth early in the disease. Instances are on record where the disease in its early stage has been transmitted by kissing. This cannot, however, be said to be a common mode of transmission.

As the bacilli are circulating in the blood, they are, as is to be expected, eliminated by the kidneys and may be found in the urine. Investigations show that they are found in the urine in about one-third of the cases. They have also been found in the sweat, tears, secretion of the mammary glands, the saliva and bronchial secretions, particularly the latter if the lungs are affected. But the chief and constant avenue by which

the germs leave the body is through the alimentary canal; that is, in the intestinal discharges.

Not all persons who get the bacillus typhosus in their bodies suffer from the disease. In some the bacilli enter and soon perish. In others the bacilli enter and multiply in the intestinal canal and are given out in the discharges, but never cause any symptoms. Such persons are called paradoxical carriers. Of those who suffer from the disease, about 95.5 per cent. cease to have bacilli in the discharges six weeks after the cessation of the temperature, while 1.5 per cent. continue to discharge bacilli until the end of three months. These are called temporary carriers. Three per cent. become chronic carriers and continue indefinitely to give out bacilli.

The facts then upon which is based our knowledge concerning the sources of the infection of typhoid fever are that the bacillus typhosus multiplies almost solely in the human body, that it enters the body by the mouth, multiplies in the alimentary canal and blood, and leaves in the discharges of the intestines and bladder and to a less extent in other excretions and secretions of the body.

The body of the patient or carrier is the ultimate source of the infection. The sick room is where the germs are most concentrated and begin their dissemination and career of destruction. It is here that contact infection is greatest. The hands of the nurses or attendant become infected from direct handling of the patient or by handling soiled clothing. The germs on the infected hands of the attendant have many opportunities of getting to the mouth directly or indirectly on food or drink.

From the sick room the germs may leave in many ways, on the hands of attendants, on soiled clothing, or other materials, on the feet of flies, and in the sewage.

Sewage must be looked upon as the greatest disseminator of typhoid fever. Not all sewage contains the typhoid germs, but one can never tell when sewage will contain the discharges from a patient or carrier.

Any method of disposing of sewage which will by any possibility allow even the smallest particle of the sewage material to gain access to the human mouth is a source of infection.

The open and insanitary dry closets, which are so common in the rural sections and small towns, and even in many of the larger cities, are points from which the germs are often distributed throughout the community. They are among the most important factors that must be dealt with in public health work. It would not be an exaggeration to say that for every insani-

tary closet that is converted into a sanitary one a life is saved.

In these insanitary closets, the excrement furnishes an excellent breeding place for flies. The flies with their feet and bodies smeared with the germ-laden material, distribute this upon the food or drink in nearby dining rooms. It is strange that the fly was not convicted of its murderous proclivities before it had killed so many of our soldiers at Camp Chickamauga during the Spanish-American War.

In these insanitary closets the material lying on the ground is likely to be carried by a flushing rain over the ground to the nearest water course, which may furnish drinking water to a community below, or it may be carried into a well or spring.

When a well becomes contaminated it is usually from the top or a few feet from the top. Contaminated water is likely to become purified if it filters through many feet of earth, unless the quantity of infection is very great, as the water bearing strata, under a city or town. The exception to this may be found in lime-stone sections or where there are fissures allowing water to reach the underground water courses without filtration.

The most frequent sources of contamination of a well are rain, washing filth into the top of the well, filth carried on shoes to the top of a well and then washed through the cracks, and filth from the hands of persons pulling the windlass or handling the buckets.

Sewage may also enter the mouth on various uncooked foods, such as milk, oysters, celery, lettuce, etc.

The germs may be carried by flies to milk or to the milk pails. The milkers or handlers of the milk may be chronic carriers, or they may be in the convalescent or incubation period. The milk pails or bottles may be washed in contaminated water, or, as in an outbreak recently worked up by Dr. Freeman, a number of cases were evidently due to milk bottles which were carried to the sick room, and returned to the dairy and sent to other parties without being sterilized.

Several notable outbreaks have been attributed to raw oysters. Large quantities of water pass through an oyster as it lies in its watery bed. If the water contains microorganisms, they readily lodge in the body of the oysters. All oysters that are taken from water polluted with sewage are possible sources of typhoid.

Uncooked vegetables may be vehicles for carrying the germs from the filth used as fertilizer or from polluted water used for watering or washing the vegetables. Although the possibilities of infection from

this source is slight, still it must be borne in mind.

Having traced the principal avenues of infection from the body of the sick to the mouth of the well, we will consider the problem of the health officer who is given a number of cases and has to determine the source in order to apply the proper preventive measures.

For the last three years, the State Health Department, through its Bureau of Rural Sanitation, under the direction of Dr. A. W. Freeman, has investigated many outbreaks in Virginia. These investigations, together with those by Dr. E. C. Levy, Health Officer, in Richmond, have thrown much light on the relative value of the different factors in transmitting typhoid.

The investigation of an outbreak consists of a careful study of all the factors concerned in the spread of typhoid as applied to each individual case. A blank form is used for the collection of the data, and the following facts are noted: name, residence, color, sex, age, date person took to bed, occupation, school attended, how long at present residence, absences from home during month preceding illness, source of drinking water at home and at place of business, source of milk used at home, source of various uncooked foods, exposure to other cases, cases in neighborhood, general sanitary condition of premises, condition of well or spring, condition of privy, screening against flies.

A comparative study of the facts elicited from the several cases involved in the outbreak will usually eliminate certain factors and also furnish a clue which can be followed up more specifically.

The trained investigator will promptly recognize the general features of an epidemic due to different causes. When the epidemic is water borne, the preliminary study promptly shows all or practically all the patients to have used a common supply of water. If in a community which previously had little or no typhoid, a number of cases occur among users of a common water supply, particularly in the winter months when flies are absent and if milk infection can be eliminated, then the water may be assumed to be the source.

If milk is responsible for an outbreak, it is usually promptly suspected. There is a high percentage of infection among the users of the infected milk and the maximum number of cases appears about the same time.

It is often exceedingly difficult or impossible to trace the source of many cases, particularly is this true of the endemic or sparsely scattered ones. Although conclusive evidence may be lacking, the fly

and the insanitary privy are often looked upon with suspicion. In many instances the circumstantial evidence is sufficient to condemn them both as accessories in the crime.

Whatever may be the factors in transmitting the infection in individual cases, the conclusion of the whole matter is that the source of the infection of typhoid fever is human filth from the typhoid patient or the typhoid carrier.

The Maternal Feeding of Infants.*

By Charles H. Peete, M.D., Warrenton, N. C.

Glancing through the pages of any current medical journal, or the usual text-book, one is struck by the paucity of any discussion of the feeding of infants save that by artificial means. Of the various methods of feeding, and the many foods, there are volumes. It at least shows that many minds are striving to give the baby what will agree with his discriminating stomach.

Before I began private work I heard a great deal about formulæ and foods for babies; but I was rather a doubter that anything but Nature's very satisfactory method of feeding was required. However, as the years have gone by I have come to realize more and more what a problem we have to face, and to study; and how necessary it becomes to approach the subject with profoundest consideration and respect. Have we ever seen greater contrasts than in looking at a pink, fat, cooing baby, perfectly healthy, dimples and creases all over, a baby that nurses at proper intervals and then settles back into its little bed and sleeps peacefully, with scarcely ever a petulant cry;—and the white, drawn, cross, fretful, thin wisp, who torments its mother's arms and raises its father's hair every night, and is wearied and dragged down by its own unrest. So many artificially fed babies, unfortunately, have this last picture.

Now since it seems that Nature's method is so much the better and simpler, does it not behoove us to do as much as we can to assist mothers to nurse their babies? I have no word but praise for the careful and persevering efforts of the men who have perfected such flexible and satisfactory methods of infant feeding, and I am fully cognizant of the many beautiful and wonderful results achieved thereby; but I have a strong idea that too often not sufficient efforts are made to help and induce the mother to feed her baby when her milk seems to lag, or the quality seems impaired. And chiefly what I want to say is to utter a word of warning,

and to call attention to this feature, a thing that we who see all sorts of ailments, and come so closely into the home life, that we are often able to bring about a change to Nature's methods, and help both mother and child. I say I am inclined to think that efforts to conserve and repair, and save, maternal feeding have been neglected. Too often a woman's milk lessens, or the baby does not seem to thrive on it, and at once some old granny, or intermeddling friend, comes in and institutes a system of feeding that maybe for a short period satisfies the infant, only a little later to produce those violent digestive disorders, so often fatal; and, frequently, because of disuse, continues to lessen the mother's milk. And I am ashamed to confess it, we doctors will stand supinely by and watch this procedure go on with none, or only soft, words of disapproval.

Gentlemen, I believe if we only spent one-half the time examining, diagnosing, and treating the mother that we spend in cudgelling our brains over various food formulæ, we could achieve substantial results in getting maternal secretion and nice healthy babies.

I have nothing new to tell you that you have not frequently seen and noted. But let us consider some of the points. We all know that city bred women are becoming less and less able to nurse their offspring. Their environment seems to blame; but I think not less so is their mode of life with its drain on the reserve store of the nervous and physical forces. Just here I hold that as physicians we should frequently forbid marriage to women whom we know to be frail and physically unfit for the results of married life, until such a time as proper hygienic and gymnastic routine have remade them into women fit for the responsibilities of marital life. I need not speak of a woman's general health during pregnancy, except to say that we seldom think how it may affect the mother's milk,—we always think of the forming child before birth, and let the future nourishment of it take care of itself. Excessive fatness and leanness, both, should be noted; if not excessive, neither condition seems to have much influence in changing lactation, either may be satisfactory, or the reverse. Indigestion, in all its forms, plays a most important part, and should be carefully studied. Included under this head is constipation. One point I have noticed is that usually passionate, sexual, women always have plenty of milk. Another is that heredity seems to have much influence; the daughter of a woman who did not nurse her children must be regarded with suspicion, for she rarely affords much nourishment for

*Read at a recent meeting of the Sixth Councillor District Medical Society of North Carolina.

her offspring; examine her at once for undeveloped glands. A woman who is a house plant is a poor selection for a baby dairy farm. Physical work with adequate nutrition is not harmful, if unaccompanied by worry or nervous strain. Mental strain inhibits the flow of milk. One fairly good index of lactation is the condition of the sweat glands,—a skin that secretes easily is apt to belong to a woman who will nurse her child. Physical deformities of the breasts and nipples should be early recognized and energetically and carefully treated. I need not mention the devitalizing and exhausting effects of prolonged and anomalous labors. Excitement and worry during the puerperium checks the flow of milk.

As to treatment and relief, I do not come with any scheme of my own to advise you. Having seen so much misery from artificial feeding, and noted that so little attention is being paid to intelligent improvement of the mother, I repeat that my chief intention is to try to awaken our minds to this problem, which, if carefully studied and worked, will yield glowing and marvelous results.

I think during pregnancy we should insist on an out-of-door life, moderate exercise, avoidance of in-door confinement and all mental stress and strain. Food should be plain, well served, digestible. Since child-bearing and lactation are pure animal functions in man, we best serve those interests by a moderate reversion to the animal type,—eating, sleeping, a cordial feeling for others, pleasant companionships, out-door physical exercise, and few intellectual pursuits,—in short, "living easy." Massage of the breasts should be begun early and done twice daily throughout pregnancy, it stimulates the lacteal vessels. The results are always good, especially in undeveloped glands, and in aged primiparæ. All anomalies should be corrected. All improper nervous conditions and influences should be removed, or the patient taken to another environment. Labor should be made as easy as possible, and should be as near normal as possible, and every effort used to prevent any sequelæ. The first thought after the safe arrival of the baby should be to secure an abundant supply of good food, and the mother's condition should be made as near perfect as may be, and minute attention to detail for the first three or four days can give a condition that will control the milk supply afterwards. Careful attention to the bowels is necessary. I contend that as soon as the bowels have moved in a patient who is doing well, she should be fed liberally, especially liquids. Quietness is essential. Primiparæ and

nervous women find that the presence in the room of the baby will keep them upset; they can't sleep. Put the baby in another room and let the mother sleep. Visitors and fussy relatives should be rigidly excluded; never mind if they do get mad. Massage and hot water stupes should be begun on the second day, the massage being gentler when the breasts begin to fill. Bland emollients are grateful. Make the baby nurse at regular intervals, and never let anything prevent it from nursing, whether anomalies, sore or cracked nipples, or what not. If sore nipples or mastitis occur our treatment or the mother's management has been at fault. I have found that the drinking of large quantities of liquid has been of more benefit in increasing the flow of milk than anything else. Eight ounces of milk or gruel every two hours is advised, with at least two feedings of this at night when awake to nurse the baby. Malt, or stout, often helps, frequently because it aids the digestion of starchy foods. Watch the digestion carefully. All mental stress and worry will upset the digestion and inhibit the flow of milk. Some women produce milk better when out of bed. As soon as possible have them out of doors with moderate exercise. One most difficult problem is when the milk manifestly disagrees with the infant. When sure of that spend any amount of time studying the mother and her health. A perfectly healthy woman rarely gives milk unfit for the baby, and I believe women whose milk habitually disagrees with the child will be found to be the victim of some serious disorder. Another serious problem is with those whose flow lessens or ceases after the third or fourth week or month. Sometimes menstruation returning seems to inhibit. Tonics will do great good, as also will massage and electricity. The intake of foods should now be practically redoubled, and much benefit comes by doing so.

These are the general points, others will occur to you as you study. In closing let me urge that we use our endeavors as physicians and teachers (as we are bound to some extent, to be) to make more of a study of getting the mother's milk back; and to make it a last resort to permit breast feeding to lapse. Continued, concentrated, observation and work will produce most satisfying results.

Local Treatment of Gonorrhoeic Infections.

By Dr. M. C. Sytle, Richmond, Va.

Let me start this paper by saying that gonorrhoea is too often grossly mistreated. I depreciate the use of strong irritating in-

jections because they aggravate the disease and damage the urethra. The treatment of acute anterior urethritis by irrigations is to be condemned, because they cause an extension of the disease by continuity. During the past few years the results in my private practice have been better than before. This statement is based upon the observation of several hundred cases of gonorrhoea at all stages. The reasons for this improvement are ascribed to careful local treatment and to having absolutely abandoned the use of any drug as an injection which could cause the slightest irritation.

In a general way my method of treatment is as follows: When a patient comes to me for treatment, after making a positive diagnosis I give him a printed list of instructions, viz: "Instructions to those having gonorrhoea or clap." Gonorrhoea is a local, contagious disease which requires treatment until the physician pronounces it cured. To avoid infecting others and to prevent complications such as bubo, stricture, swollen testicles, etc., the following rules should be carefully observed.

1. During the first week, walking should be limited. When the discharge is profuse you should keep off your feet as much as possible.

2. Do not use alcohol in any form, as it always prolongs the disease. Drink milk, tea—Vichy Seltzer and from six to eight glasses of water during the day. Avoid all sexual relations until you have been pronounced cured by your physician, as the disease may be given to a woman, even after the discharge has apparently ceased. When it is present you should avoid sexual excitement, as erections always aggravate the disease.

3. Always wash the hands after handling the parts. The discharge if carried to the eye will cause blindness.

4. Sleep alone and be sure that no one uses any of your toilet articles, particularly towels and wash cloths.

5. Be sure that the bowels move every day. If they are inclined to be constipated take a dose of Rochelle salts before breakfast.

6. Do not use mustard, pepper, horseradish or stimulating sauces on your food.

7. Burn all soiled dressings.

For acute gonorrhoea I prescribe a light diet with very little meat, and no fats, fruit or alcoholic beverages, but allow as much skimmed milk as the patient can drink. If the infection is confined to the anterior urethra, I generally use an injection of two drachms of a ten per cent. solution of argyrol held in the urethra about ten minutes. This injection is made morning, noon

and night. Internally I give them a capsule containing salol, belladonna, terbene and sandalwood three times a day. This treatment is practiced for one week, during which time the discharge will almost cease. If at the end of one week the urine remains continuously shreddy, a weak solution of astringents be employed add of these drugs—zinc sulphate, hydrastin, or beberine muriate are useful, but above these all I prefer Nizin (a zinc salt of sulphanilic acid) about two grains dissolved in one ounce of water making a suitable injection. Here let me again emphasize that these astringents should not be used during the first week, and never in solutions sufficiently strong to produce pain or irritation.

In many cases I have tried permanganate of potash, but with not very much success, so I have discontinued this treatment. Irrigation of the deep urethra by means of hydrostatic pressure is injurious in the majority of cases of acute gonorrhoea and aids the development of complications which very often bring on orchitis.

It must be remembered that we have to deal not only with the gonococci, but with the destructive action of the organism. In other words, destroying the gonococcus does not by any means imply the cure of the disease as there always remains a condition of catarrhal urethritis, which requires a particular line of treatment.

If a case of gonorrhoea is seen in the early inflammatory stage when ardor urine and chordee are the most annoying symptoms I generally give the patient powders of salol, potassium bromide, sodium bromide each $2\frac{1}{2}$ grains every three hours. At the same time a hand injection of a five per cent. solution of argyrol is given. At the end of the third week the patient enters upon the stage of decline or the mucous terminal stage. Here we need astringents to build up and restore the integrity of the damaged mucous membrane. A good plan is to use a 5 per cent. solution of argyrol night and morning, and throughout the day any of the following astringents may be used:

R	Zinc sulphate	grains 10
	Bismuth sub. carb.	drachms 2
	Liquid hydrastis	ounces $\frac{1}{2}$
	Distilled water	ounces 4
R	Zinc sulphate	grains 11
	Lead acetate	grains 5
	Liquid hydrastis	ounces $\frac{1}{2}$
	Distilled water	ounces 4
R	Carbolic acid	grains 4
	Zinc sulphate	grains 11
	Powdered alum	grains 11
	Distilled water	ounces 4

If the morning drop, a thing which has baffled so many physicians, continues and causes the patient's nervous system to be greatly disturbed, Neisser's bacteria which is so often used for gonorrhoeal rheumatism by the intra-muscular method will be found of much help as an injection into the urethra. The bacteria comes in small bottles, each c.c. containing five hundred million killed bacteria. Of this I inject about six drops three times a week. I have found it to cause a slight temperature after the first treatment, but at the end of the last injection the morning drop eventually disappears without any further complication. I now irrigate the anterior urethra with a warm solution of boracic acid in order to remove any accumulated secretions that might be left. I then make a deep installation of a twenty per cent. solution of argyrol once daily.

Statistics of several hundred cases treated by this method show a great diminution in the amount of pain and a shortened duration of the disease with the extreme rarity of many complications.

Most cases of chronic gleet are due to ulcerated conditions of the urethra. After determining the exact location of the individual ulceration, the method of treatment depends upon whether the ulcers are localized or whether there is a co-existent general hyperemia of the urethra. If general hyperemia is present, we should proceed mild astringents in order to rid the urethra of the muco-purulent accumulations. About four weeks of this treatment, being careful in the use of instruments, will nearly always heal the ulcerations.

GONORRHOEA IN THE FEMALE.

A case came under my observation, Miss A. A., aged 20, suffering from an endometritis urethritis and typical symptoms of gonorrhoea. The microscopic examination was positive. In this patient the vagina was dilated by means of a speculum to the fullest extent so as to reach every portion of the vaginal mucous membrane; a forty per cent. solution of argyrol was applied to this area as also to the urethra by means of a cotton-tipped probe. The interior of the uterus was then freed of the accumulated secretion by a cotton-wrapped applicator and then the argyrol solution was applied to the inner surface of the cervix and body of the uterus. These applications were repeated two or three times, the treatment being carried out on every second or third day. After the eighth day no gonococci could be found. For home treatment the patient was ordered to use a vaginal douche of from two to four quarts of hot boracic acid solution taken in a recumbent position.

In conclusion, let me state I depreciate strongly the treatment of anterior urethritis by means of irrigation, because of the danger of spreading the disease to the posterior urethra. Irrigating injections of any kind should never be used in acute gonorrhoea, because of the certainty of occurrence of a mixed infection and the extension of the disease by continuity of the urethral follicles. Astringents such as zinc, hydrastin, bismuth and lead should never be used in acute stages but should be reserved for the post-gonococcal period when the urine remains shreddy.

104½ West Grace St.

Report of a Case of Parinauds Conjunctivitis.*

By J. G. Johnston, M.D., Chester, S. C.

The rarity of this disease is my only excuse for taking up your time with this report, as well as rapidly running over some of the more prominent symptoms. The case about to be reported was referred to me and I saw at once that I had an entirely new disease to treat from any that I had ever seen, and as my attention had never been called to Parinaud's conjunctivitis, I had to rely on my own initiative in the treatment.

Parinaud's conjunctivitis is a self-limited, infective inflammation of the eye-lids, with the formation of large polypoid granulations on the conjunctival surface, together with marked swelling of the glands of that side of the face and neck. It is usually unilateral.

Cause.—Parinaud, himself, believes it to be of animal origin. Of this I cannot speak authoritatively, but in my patient, a boy of 14, and his dog were almost inseparable companions.

Symptoms.—The lids were markedly swollen, and at first sight had the appearance of gonorrhoeal ophthalmia. The discharge is free, however, for a very short time, and no gonococci can be found. This swelling takes place suddenly and gradually passes away as the case progresses toward recovery. Upon examining the conjunctiva, we find it the seat of large granulations, which may be on the ocular conjunctiva as well as on the lids. Sometimes these granulations are polypoid in character. Occasionally we have chemosis of the ocular conjunctiva. The cornea is usually unaffected, though such affection takes place occasionally. One of the prominent symptoms is the marked swelling of the glands of the face and neck of that side.

*Read before the South Carolina Medical Association, Charleston, S. C., April 19th, 1911.

These glands may be very tender on pressure, and seemingly would suppurate in spite of treatment, but such termination seems to be very rare.

Prognosis is good, as the disease tends to get well of itself. They usually recover in from two to six months. Personally, I am of the opinion that they could be cured much more quickly if we saw them earlier and could begin to treat them more promptly.

As for treatment, nitrate of silver seems to have the preference, though many other things, as sulphate of copper, bichloride of mercury one per cent., cyanide of mercury 1-10000, have been used. Some rely on surgery, in clipping off the granulations, and once, at least, the whole of the affected conjunctiva, as well as the underlying tarsus, and, by the way, this tarsus was healthy, was removed. This is merely mentioned to show that so far there is no unanimity of treatment.

M. N., age 14, was referred to me on October 4th, after having suffered for three or four weeks with an intractable condition of the right eye. I found the eye much swollen, in fact almost closed, and the glands in front of the ear and along the neck enlarged. He was pale and lacked appetite. He was going to school, but work hurting the eye, he was in the habit of wearing a black silk flap over it. There was some discoloration around the eye. On opening the lids the conjunctiva was found covered with large flat polypoid masses, some of them more or less pedunculated. This was more noticeable on the lower lid, the conjunctiva of the upper looking more like simple elevations, but they lay so close together that they covered the whole surface: The cornea was not affected, nor did it become so at any time during the course of the disease. The pupil was normal throughout, as was also the iris.

At the time he was referred to me he was simply using a boric acid wash and taking an iron tonic. I saw at once that this was something that I had never seen before, and it was not until I read an article on Parinaud's conjunctivitis in the January Ophthalmic Record that I recognized the nature of the trouble. This right eye was treated from October 4th to November 20th. At first every day, then every other day, and finally twice a week, until normal condition was reached. He was allowed to continue his tonic and the boric acid wash, but in addition, after cocaineizing the eye, vigorous application of a two per cent. solution of nitrate of silver was made, by means of a cotton wound applicator. The excess was washed off after having been left on for two or three minutes. The good effect of this

line of treatment could be seen after about a half dozen treatments, but it was not until November 20th that the eye condition was practically normal, although at that time the eye still had the appearance of being a little swollen. This appearance of swelling had entirely passed away by Christmas, and the eye has been normal ever since.

On December 3rd, or just about two weeks later, the left eye began to show signs of the same trouble. There was the swollen look, with probably some slight swelling of the glands on that side of the face. The lesions of the conjunctiva were confined to the lower lid and the granulations were not nearly so large as in the other eye.

The same treatment was carried out in this as in the other eye, and in twenty days, or on December 23rd, the left eye was also well, and has remained so until this time. Whether the left eye was a genuine case of Parinaud's conjunctivitis I cannot say positively, yet it responded to treatment very readily, which may have been due to the fact that treatment was instituted at once. There was certainly some things about it that led me to believe that it was going to be like the other one. I regret that I did not see the first one until it had been affected for some time, as I might have been more able to speak positively of the last one. If the left eye was a genuine case, it seems to teach that it can be controlled very much more readily when treatment is begun in the incipency of the disease.

Hydrotherapy—The General Effects and Benefits of Hydrotherapy.

By Dr. J. C. Walton, Richmond, Virginia, Proprietor Hydro-Electro-Therapeutic Sanatorium; Surgeon Neurologist, Southern Railway; Ex-member N. C. State Board of Medical Examiners; Honorary Fellow N. C. State Medical Society, the South Piedmont Society, The Danville Academy of Medicine, The Va. State Dental Society.

Hydrotherapy includes the application of water in any form, from the solid and fluid to vapor, from ice to steam, internally and externally. Water is not only the most abundant and indispensable of all the elements, but it is also the most flexible of all remedial agents.

It can be administered at temperatures ranging from 40 to 120 deg. Fah. When we realize that a change of five degrees in temperature causes a marked difference in its effects you can readily appreciate what an enormous latitude is offered for grading its effects on the human organism.

The external effects of water are due chiefly to its thermic and mechanical action and to its irritating influence on the neuro-

vascular cutaneous systems.

The cardinal principles to be observed in the external application of water are the temperature, the pressure and the duration of the application. Temperature and duration are of vital importance, dip your hand into water at a temperature of 40 deg. Fah. for one minute, remove and dry it, the skin becomes warm, red, and feels pleasant, dip the other hand into the same water for three minutes, remove the hand and dry it, the skin is cyanotic, the hand is painful and some time elapses before warmth and comfort are restored.

Pressure is also very important, for when water is applied at a pressure of from ten to forty pounds its effects are very much enhanced and the reaction is also much more prompt and decided.

In administering water applications the changes from hot to cold should be made very gradually, never abruptly as your object is to avoid too great shock and the attendants should be careful to see that the patient responds promptly and that there is a good reaction.

In administering water applications the organism should be gradually trained to produce its own reaction, and also as one of the prime objects to be derived from taking a bath is to increase oxidation it is therefore of vital importance that the bath rooms should be *well ventilated* and never allowed to become *warm and stuffy*, the attendants should be well impressed with the fact that *heat is enervating and depressing* and that *cold is tonic and stimulating*.

The recognition of the above principles by modern hydrotherapists has largely been instrumental in replacing that relic of barbarism, the Turkish and Russian bath, by the modern cabinet and electric light bath. In institutional work a modern hydrotherapeutic outfit so constructed as to give the operator perfect control of the temperature and pressure is a *sine qua non* in the successful treatment of chronic diseases. In hydrotherapy probably more so than in any other remedial agents the element of precision and the careful attention to minutiae and detail is absolutely necessary to obtain successful and satisfactory results. However, to fully understand and to appreciate the possibilities of hydrotherapy, especially institutional hydrotherapy, it will illustrate and simplify the subject by showing you a modern outfit where you can see the treatments administered by trained attendants.

I will be delighted to have any one present visit my offices at Murphy's Hotel, where every facility will be offered to investigate and to get a practical working idea of some of the most salient features of hydrotherapy. In private practice much

has been accomplished, and when we consider that it can be administered at any bedside, the only essentials required being a basin of water, a towel with a modicum of gray matter, its manifold advantages must be obvious even to the most callous.

Hydrotherapy has scored a most brilliant success in the treatment of typhoid fever, notwithstanding the fact that the majority of practitioners in the beginning had false conceptions regarding the indications for hydrotherapy in this disease, *i.e.*, they fought the temperature instead of the toxemias.

Baruch long since demonstrated that hydrotherapy was valuable in typhoid fever by its tonic and stimulating influence upon the vital centres and by its power to arouse the dormant nerve centres in order that they might properly respond to external stimuli and thereby throw off the toxemias which were destroying the patient.

Baruch also taught us the great value of the cold bath in making the differential diagnosis between typhoid fever and pneumonia, showing that while the cold bath had only a slight effect on the temperature of typhoid fever, that its effect on the pneumonic temperature was very prompt and decided—not infrequently amounting to several degrees.

In stomach and bowel diseases, washing out the former and irrigating the latter is the quickest and most effective way in obtaining true disinfection of these important avenues from which we get the majority of our infections.

As a local application in the early stages of congestion cold compresses are indicated so long as the circulation is active and the color good. When, however, the parts assume a cyanotic hue and leucocytosis has taken place, then change to warm compresses to hasten suppuration which is then unavoidable.

Cold applications diminish congestion, retard leucocytosis and emigration of the white cells, while warm compresses have just the opposite effect. As cold applications have the tendency to raise and warm applications to lower the blood pressure it is very important when giving the light bath to reduce tension to follow the bath with warm douches at the body temperature.

One of the most remarkable therapeutic advances of recent years is in the treatment of insanities, maniacal excitements, &c., by the prolonged hot bath. The patient is placed in a cradle or frame and is lowered into a tub of hot water and left there sometimes not only for hours but frequently for days and weeks.

The above treatment is very soothing

and restful, and has been known to quiet and put to sleep the most violent insane patients.

So satisfactory has this treatment become that it has gradually replaced other methods of treatment for various forms of insanities.

This is now the standard treatment in the Manhattan State Hospital West, on Ward's Island. Insanity is now regarded by many as a symptom of physical illness and the patient on entering the hospital is treated accordingly. So instead of the padded cell, the bath tub; instead of the strait jacket, the Scotch dress.

In serious lacerated injuries of the extremities and in conditions of poor local circulation prolonged immersion of the parts in hot water frequently saves the limb by giving nature and the vital forces time to react and recuperate.

The Uses of Water Internally.—The use of water internally is more important and necessary than it is externally.

Owing to the great natural difficulties in obtaining a sufficient supply of pure drinking water this problem is rapidly becoming a very serious one with municipalities and, like Europe, this country will soon become dependent upon bottled waters for this purpose.

No form of life can exist without water, and as water is the universal solvent as well as the natural eliminator and sewer of our bodies, ordinarily it should be drunk freely, using from two to four quarts daily.

"The solvent action of water upon toxins in the blood and viscera" cannot be too strongly emphasized.

"Catabolic waste material is diluted and more readily eliminated, and autointoxication and stasis relieved or obviated."

"The drinking of cold water before meals stimulates gastric secretion." Hot water drinking diminishes gastric secretion; therefore for hyper-chloridia order hot drinks, and for hypo-chloridia cold drinks. Carbonated waters stimulate peristalsis and also increase the secretion of the healthy gastric mucous membrane (these waters cause diuresis by increasing blood pressure.) —Dieffenbach."

"According to Huggard, water taken into the stomach does not remain there long, its absorption takes place to only a small amount in that organ, most of it passing through the pylorus. In a man water appeared at a fistulous opening in the duodenum half a minute after being drunk. In a horse it appeared in the caecum six minutes after being swallowed."

"Both hot and cold water in moderate quantity appears to excite the peristaltic action of the stomach; but hot water passes

on more quickly. Cold water in large quantities arrests the movements of the stomach. Both cold and hot water excite the secretion of gastric juice, but cold is more active in this respect.

Peristalsis of the bowels is also promoted especially by cold water. In large quantities and for therapeutic objects hot water is better borne than cold unless fever is present; and then cold water or ice sucked is more agreeable to the patient and at the same time tends to lower temperature.—Huggard.

Radio Active Waters.—One of the most important recent discoveries as well as one of the most practical and far reaching in its results, is the *scientific fact* that the *curative effects* of certain *noted mineral waters* are due to their being *radio active*

This largely explains why these waters have more effect when drunk at the springs. From time immemorial the profession has been at a loss to account for the beneficial effects derived from drinking certain popular mineral waters, as their analyses contained nothing which could possibly justify the claims of their most enthusiastic advocates. While the term Lithia Water was advertised and exploited we all knew that none of these waters contained more than an infinitesimal amount of lithia, and we furthermore knew that the lithia salts possessed no special virtue as uric acid or other solvents.

As tending to clarify this subject I quote with pleasure from an editorial in the New York Medical Journal May 4, 1912.

"ON MINERAL SPRINGS AND THE NEW ELEMENT NITON.

In an article on the new element Niton, the so-called "Radium Emenation of Ruthenium," Dr. K. L. K. Hirshberg, of Johns Hopkins, states (Scientific American) "that until Sir William Osler came along with scathing nihilistic words, and rid the scientific world of the delusion that the waters of Lithia springs, Sulphur springs, Vichy springs, Carlsbad, and other watering places had the marvelous power of curing joint troubles, blood and constitutional diseases, there was hardly a physician in the civilized world who was not convinced of the powers of the particular waters of some particular springs to which he sent his patients.

But unfortunately for Osler's nihilistic views and fortunately for science Monsieur and Madame Curie discovered radium, while subsequently other great workers in physical chemistry, including Thomson, Ramsay, Crookes, and Rutherford found traces of radium in the waters of many mineral springs.

Then followed the discovery by Sir Wm. Ramsay, not only of the fact that the wonderful properties of radium were due to the gas niton, of which it contained 75 per cent., but also that the curative value of the spring at Bath, England, was due to the niton that its waters contained.

We are thus furnished with an explanation for a phenomenon which has given rise to considerable speculation, viz., the fact that mineral waters that are prepared artificially, even though the formula of the bona fide spring is reproduced with the utmost care qualitatively and quantitatively, fail to produce the same effect as the waters of the original spring, especially when used at the spring itself.

The fact remains that it is now known that a "powerful spray of tonic electrones" underlies the therapeutic action of at least certain mineral waters, and also that another of Osler's nihilistic doctrines is being rudely shaken.

Lowe, in the British Medical Journal, says that radium emanations in mineral waters is credited with the following powers: 1. Great increase in diuresis and excretion of uric acid. 2. Increase in carbon dioxide exhalations 20 to 60 per cent. 3. Lowering of blood pressure, especially in arterio-sclerosis. 4. Decrease in the viscosity of the blood. 5. Great improvement in gastric and duodenal digestion. 6. Solvent action on gouty deposits. 7. The disassociation of uric acid and its salts into carbon dioxide and ammonia. 8. Inhibitory action in inflammation and relief of pain in rheumatism. 9. Increase in sexual vitality. 10. Considerable influence upon the sympathetic nerve affections. 11. Production of marked results in diabetes, albuminuria and glycosuria.

It is held by many that in this element is found the explanation of the therapeutic effects of many mineral waters.

Radio active waters are now being extensively used with great success in England, Germany, Austria, and France in the treatment of rheumatism, gout, neuritis, neurasthenia, arterio-sclerosis, Bright's disease, diabetes, intestinal diseases, &c.

At the British Medical Association in July, 1911, Drs. Armstrong and Harburn, of Buxton, England, reported the results of their observation of over 600 cases treated by radium emanations. The results noted were briefly great increase in diuresis, great increase in carbonic acid exhalation, lowered blood pressure, especially in arterio-sclerosis. In diabetes decreased sugar. In albuminuria decrease of albumin and blood pressure, increased elimination of body toxins by kidneys and lungs. In glycosuria complete disappearance of sugar. In

arterio-sclerosis marked decrease of blood pressure. In gout increase of volume of uric acid excretions, disappearance of uric acid crystals in urine, of pains, swelling and stiffness of affected parts. In arthritis improvement in nearly all forms.

Dr. Klemperer, of Berlin, an associate of Prof. His, says that he has never seen as good results from any other treatments.

Dr. Wilke claims increase in the uric acid up to 14 per cent. and of urea to 34 per cent. It seems to be an established fact that radium emanations penetrate every animal tissue and membrane. that it increases the activity of the digestive ferments, regulates secretion and excretion, and that it exercises a potent influence upon all diseases of metabolism.

As many of the mineral springs of this country are radio active, score another point for our natural resources and for the *vis medica naturæ*. Priesnitz, a Silesian peasant (1828) was the pioneer who rescued hydrotherapy from the sleep of centuries.

Priesnitz was such a strong believer in the efficacy of water in disease and his success was so pronounced as to invite favorable investigation by the Austrian Government; the water cure which he established became the mecca for European invalids, and some of his methods survive today.

Priesnitz was followed by Oertel, Brand, Winternitz and Baruch, and these last two are regarded as the father of modern hydrotherapy.

Coincident with Winternitz, the incontestable success of Brand in the treatment of typhoid fever compelled recognition from even the most myopic drug prescriber and the truth of the ages has at last become the medical property of many countries.—Diffenbach.

Priesnitz taught that the object of his curative methods was to expel the bad juices and replace them by the good; the means used were water, air, exercise and diet.

Dr. S. Colis Cohen, in his system of physiologic therapeutics, suggests that there should be maintained in every city an establishment to which any physician might refer his patients with a definite hydropathic prescription just as he can now send to the apothecary with a definite pharmaceutical prescription.

Dr. Baruch, in a letter to the writer, says "You are aware that I insist upon exact adaptation of the water treatment to the conditions and the reactive capacity of each individual case. It is to be regretted that physicians do not familiarize themselves with the technique and the action of the various procedures. You should invite your colleagues to your rooms and let them

either take some treatments or see them administered. One or two visits would put them in possession of knowledge that would surely inure to their patients and their own advantage.

"Here a warning against sending patients with arterio sclerosis to Turkish bath establishments may be in order. Deaths have been reported as the result of entrusting these patients to the ignorant bath attendants. As I have long insisted, the cabinet hot air, or, better still, the electric light bath is far superior, because the patient may breathe cool and therefore unexpanded air, and may be refreshed and guarded against untoward accidents."

These warnings by Dr. Baruch are timely, and especially so as cases of tuberculosis have been contracted in Turkish bath establishments. Scientific hydrotherapy is well and ably taught in Germany and most of their principal hospitals are equipped with modern hydrotherapeutic outfits.

Von Leyden, after speaking of the great value of physio-therapy, says that it should be utilized not in the clinic alone but it must become the property of the general practitioner.

Dr. Fred Peterson of the Vanderbilt Clinic for Nervous Diseases, says it is too well known that the administration of drugs, very valuable as they may be, and the employment of electricity are rarely sufficient, especially in nervous disease, to effect a cure.

The water treatment certainly has many features that appeal strongly to a sense of rational treatment. For are we not able thereby to affect very markedly the local innervation, to dilate and contract vessels, alter the circulation to a part, change the distribution of the blood of the whole body, weaken or strengthen the cardiac contractions, vary the amounts of secretion and excretion, increase heat radiation, &c.

But I could continue indefinitely, but why multiply? Scientific hydrotherapy will never be appreciated and come into its own until it is taught and is correctly taught by our medical schools and not until they cease to graduate students who don't know the difference between a Scotch douche and a glass of Scotch whiskey.

Authorities referred to—Baruch's Hydrotherapy; Dieffenbach's Hydrotherapy; New York Medical Journal; British Medical Journal; Prof. Platt Harvard University.

The Economic and Sociological Value to the State of Preventive Medicine.

By B. F. Rea, Jr., M.D., LaPayette, Alabama.

The immortal researches and discoveries of Pasteur and Koch demonstrating the etiological relationship of micro-organisms

to disease put medicine on a firm and enduring scientific basis. From the dawn of creation to the epoch-making discoveries of Pasteur and Koch practically nothing was known of the causes of diseases, and no efficient means could be taken for their prevention. Bacteriology has enlarged our comprehension of the nature of infectious diseases and has established prophylaxis, diagnosis, and treatment upon a broader and firmer basis. Metchnikoff, the noted biologist and bacteriologist, leader of the Pasteur Institute of Paris, asserts that rational hygiene and preventive measures will ultimately rid mankind of diseases. Pasteur asserts that it is within the power of man to rid himself of every parasitic disease. Preventive medicine is a new science and its importance is not generally realized. Metchnikoff shows that in a vast majority of cases death is not natural but comes from accidental and preventable causes.

Statesmen at present are interested in the conservation of our natural resources, conserving lands, waters, minerals and forests, but overlook the fact that conservation of human life is equally important. At present there is little conservation of life except in cases of animals and plants. These have commercial value. The Agricultural Department at Washington spends fifteen million dollars a year to tell the farmers how to treat soil, and how to prevent diseases of the cattle and hogs. It seems to me that the Government should be equally interested, at least, in sending out literature instructing the people how to prevent cholera infantum, typhoid fever, and other preventable diseases.

Senator Owens, in a recent speech before the Senate of the United States, in his bill for a National Department of Health, states that the people of the United States suffer a preventable loss of over six hundred thousand lives a year, a daily senseless sacrifice of an army of over seventeen hundred human beings every day of the year. Over one a minute from one years end to another, and year after year. This terrible loss might be prevented by reasonable safeguards under the co-operation of the Federal and State authorities, each within strict constitutional limits and with an expenditure that is utterly trivial in comparison with its benefits. These preventable deaths are caused by polluted water, impure and adulterated food and drugs, epidemics, various preventable diseases—tuberculosis, typhoid and malarial fevers, unclean and bad sanitation. Measuring the money value of an American citizen at \$1700, this preventable loss by death alone is one thousand and millions of dollars annually. There

are six hundred thousand deaths in the United States annually from preventable diseases. There are three million people seriously sick at all times in the United States from preventable causes, of whom one million are in the working period of life. About three-quarters of a million of actual workers losing on an average of \$1700 per annum—an approximate loss of five hundred millions.

I do not think it necessary to resort to this financial calculation in order to justify the saving of human life, such as can be accomplished by the results of research and advice that will proceed from a bureau of health properly established at Washington and circulating the results of its investigation through the country. The prevention of disease increases economic productivity. From an economic standpoint it pays the State to prevent disease. It is good business. Thousands of people are ignorantly and needlessly exposed to the poison of the mosquito and the fly, to bad water, bad air and bad food. We ought to have every school teacher in the United States with bulletins in his hands teaching the lessons of simple public health, the lessons that will protect the children from the infected mosquito, that will protect the country family from the infected fly that conveys the typhoid fever germs.

The most pathetic of all forms of blindness—that caused by ophthalmia neonatorum—is preventable. It is estimated that there are between six and seven thousand blind in the United States of ophthalmia neonatorum, needlessly blind and a burden to the State. In 1881 Professor Crede, of Leipsic, director of the Maternity Hospital connected with the University, made the wonderful announcement that a single drop of a two per cent. solution of nitrate of silver dropped by a glass rod on the eyeball of the new-born infant would destroy the germs of ophthalmia neonatorum, should any be present, and would not injure healthy eyes. The value of Crede's discovery is now accepted by physicians everywhere. Of course it is better to go to the root of the matter and prevent the disease in the parents, causing the disease.

From a sociological standpoint preventive medicine is a good thing. Future generations will have the benefits of improved heredity by the present one living in a good hygienic environment. Dr. Woods Hutchinson, the noted writer on Hygiene, states that if a National Health Department were established and properly administered, half the crime would cease in twenty five years.

The progress of civilization will depend on heredity and hygiene, or conditions preceding birth and conditions during life.

Vitality is partly inherited and partly acquired. I maintain that hygiene is at present the most important subject before humanity for consideration. I believe that the teaching of hygiene and sanitation should be compulsory in all public and private schools. I believe in the medical inspection of school children. They should be examined for refractive errors and, if found, fitted with proper glasses, and examined for adenoids and removed if found.

The Diagnosis and Treatment of Hydatidiform Mole.

By J. M. Mason, M.D., Birmingham, Alabama,
Gynecologist to St. Vincent and Hillman
Hospitals.

The condition known as hydatidiform mole or molar pregnancy is frequent enough to be of decided interest to every physician, and is infrequent enough to cause a good deal of uncertainty and many mistakes in diagnosis.

The disease is characterized by cystic degeneration of the chorionic villi, whereby they are converted into transparent grape-like vesicles varying in size from that of a millet seed to half an inch or more in diameter. These vesicles, being held together by thin, thread-like pedicles, give the characteristic grape-like appearance to the mass.

The disease generally makes its appearance before the third month of pregnancy, and may attack the entire chorion or may involve only a part of it. When the entire membrane is involved the fetus quickly dies and disappears; in other cases it may be found if the uterus is emptied or empties itself early, and in a few instances weak, poorly nourished fetuses have been expelled alive.

Closely resembling the benign disease described, and frequently following it, is the malignant condition known as deciduoma malignum. This malignant growth may develop after full term delivery, after an abortion, after the expulsion of a hydatidiform mole, or in the uterus before the expulsion of the mole. For this reason, all cases of hydatidiform degeneration should be kept under observation and examined for evidences of recurrence for some months after removal of the mole; also, microscopic sections should be made in suspicious cases for evidence of malignancy.

Symptoms and Diagnosis.

When a reliable history is obtainable, this, together with the symptoms usually present, will almost surely lead to a correct diagnosis if the possibility of the condition be but kept in mind.

The patient will usually give the history

of having missed one or more menstrual periods, and of having had the symptoms usually attendant upon early pregnancy. The uterus enlarges rapidly, presenting a size out of proportion to that which should obtain at the period of the supposed pregnancy. Sooner or later hemorrhage develops, sometimes alarming in amount, and some of the cysts may be expelled. When the cysts are discovered, the diagnosis is certain. Abortion frequently takes place, and almost certainly does this occur if the uterus is not emptied before the sixth month. If the hemorrhage is not large at first, it may still bring about a serious degree of anemia by its continuation as a small but steady metrorrhagia.

In some instances the villi penetrate the uterine wall, following, according to Williams, the course of the venous channels, and may actually go on to perforation of the uterus, as in a case reported by Waldo in the American Journal of Obstetrics for September, 1910:

One may never be sure that the uterine wall is not very much thinned out and in danger of perforation, so great caution should be exercised in the treatment of any case, especially if the uterus has attained large size.

The one pathognomonic feature of the disease is the finding of the cysts in the uterine discharge or in feeling them with the examining finger through the cervical canal.

In the absence of these signs, the hemorrhage, with great disproportion between the duration of the pregnancy and the size of the uterus, will lead one to the correct diagnosis in most cases.

Treatment.

The treatment should depend upon the time at which the patient comes under observation, her age, her general condition, especially as regards anemia, and the size of the uterus. Williams says that the uterus should be emptied as soon as the diagnosis is made. I would modify this by saying that the uterus should be emptied or removed as soon as the diagnosis is made. However, I would insist on distinct and positive indications for removal of the uterus, and shall attempt to point out these in one of the cases which I report.

If the condition be discovered while the uterus is small, dilatation and curettage may be undertaken, but it must be borne in mind that there is some risk of perforation, and the prudent surgeon should be prepared to open the abdomen if he meets with such an accident.

Curettage is mentioned as an acceptable method of treatment, for it is doubtless the

method pursued in most cases, and certainly in those where a diagnosis is not made until the material brought away by the curette shows the grape-like cysts and gives the correct clue to diagnosis.

Hemorrhage is always free in this method of treatment, and the surgeon who deliberately plans it must have carefully studied the resisting powers of his patient with reference to the probable effect of a large loss of blood. That this is no imaginary danger is proven by the analysis of 100 cases by Dorland, in which 3% died from hemorrhage at the time of operation.

If the patient is not seen until the uterus has become very much enlarged, say up to or above the umbilicus, I believe curettage to be positively contraindicated on account of the danger of hemorrhage and perforation.

In a young woman the loss of her uterus should act as an offset to these dangers, and if provision is made for her safety in case of either of these accidents, curettage or the induction of labor may be undertaken if the patient is in good condition at the time of operation. In a patient nearing the menopause or in one who has already become very anæmic these measures should not be considered. Here hysterectomy is decidedly safer and also removes the danger of subsequent development of decidua malignum.

Three cases of this disease have come under my care, each one presenting different problems in diagnosis and treatment.

CASE 1.—Several years ago I was called several miles in the country to see a patient who supposed herself to be about two months pregnant. Severe hemorrhage had started earlier in the day. On examination the uterus was found to be about as large as it should have been at four months. The physician in charge had made a probable diagnosis of hydatidiform mole, and in this I concurred. Curettage was the only feasible thing in this case, both on account of the urgency of the condition and the remoteness from the hospital. A large amount of the grape-like material was removed, with no sign of a fetus, and with no accident. The patient lost a quantity of blood, but made a slow but complete recovery.

CASE 2.—In this instance the diagnosis was not made until spontaneous abortion revealed the true condition. The size of the uterus and the supposed period of pregnancy did not differ enough to draw attention to hydatidiform mole, and the trouble was supposed to be due to threatened abortion.

The patient consulted me on July 16, 1912. She was married in January, had one perfectly normal period and then had

been so irregular that she could not estimate the probable duration of pregnancy, but thought it was two and a half to three and a half months. During May and June she had suffered severely from gravid nausea. For four weeks she had been bleeding a little every day.

Examination revealed a uterus the size of three and a half or four months pregnancy, a tightly closed cervix and a slight bloody flow.

I advised rest in bed with opium, thinking that abortion might be prevented. She followed this advice conscientiously but on July 27 aborted before I reached the house, expelling a quantity of the grape-like material. No special hemorrhage accompanied the abortion. On examination I found that the uterus was not entirely empty, so took her to St. Vincent's Hospital and removed a considerable quantity of secundines with a dull curette, but found no sign of a foetus and no more of the grape-like material.

This proved that, in this instance, only a part of the chorion was diseased, and was perhaps the reason that the period of gestation and the size of the uterus showed no great disproportion. She made a prompt recovery.

CASE 3.—This case proved exceedingly interesting in that the difficulties of diagnosis were greater, the patient's condition was more unfavorable, and the plan of treatment was more radical.

Mrs. M. K., white, aged 46, the mother of eleven children, was admitted to my service at St. Vincent's Hospital on August 29, 1910. Her last pregnancy was seven years ago, and resulted in a miscarriage.

Ten weeks before admission she began to have a uterine flow, and this was continuous up to the time of her admission. Previous to this flow she had been perfectly regular in her menstruation. Since the appearance of the flow there had been some nausea but none of the other symptoms usual with her when she was pregnant. An abdominal tumor was noticed by her about three weeks before admission and it had increased in size very rapidly. She noticed that it alternately hardened and softened, and called my attention to this feature.

Examination revealed a rounded, smooth abdominal tumor reaching a little above the umbilicus. It was freely movable and slightly tender. Alternate hardening and softening of the tumor occurred every few minutes, and was easily detected. There was a suggestion of fluid in the abdomen, but change of position with percussion, &c., ruled this out.

The vaginal outlet was much relaxed and the cervix was badly torn. The cervix

was rather soft, suggesting the condition found in early pregnancy. The tumor seemed to be continuous with the uterus. No foetal parts could be made out, and the foetal heart could not be heard. Nothing definite could be made out regarding the adnexa, but there was no tenderness on either side of the uterus. There was a bloody discharge from the uterus, and the hemoglobin was only 50%.

Taking the history of slight nausea, cervical softening, intermittent relaxation and contraction of the tumor (Braxton Hicks' sign) together with a steadily growing tumor and hemorrhage, we decided that the tumor was that of a pregnant uterus.

The tumor was the size of a seven months pregnancy, but no foetal parts could be made out, either through the abdomen or the vagina. Quickening had not been felt, and no foetal heart sounds could be detected. The history, which seemed to have been honestly given, showed the pregnancy, if such it was, to be of not more than three months duration.

Nothing corresponded to this group of symptoms except molar pregnancy, and this diagnosis was made.

Curettage, or otherwise emptying this enlarged uterus promised to be accompanied by severe hemorrhage, and, as her hemoglobin was already reduced to 50%, this was not favorably considered. Further, on account of the possibility of the development of decidua malignum, we did not think conservative measures would be proper at her age.

Hysterectomy was decided on as the safest thing for her, and this operation was performed on August 31.

A large amount of the cystic material was present in the uterus and also some placental tissue. There was no foetus. The uterine walls were not particularly thinned.

She made an uneventful recovery and left the hospital on the 18th day.

Summary.

1. In cases diagnosed early, while the uterus is small and its walls still thick and firm, curettage may be undertaken without fear of any untoward result.

2. In cases seen later, with the uterus still not larger than it should be at three or four months, curettage or the production of abortion may still be undertaken if the patient is in a hospital or if the surgeon is prepared to go further if necessary to control a severe hemorrhage or treat a perforation of the uterus.

3. In cases seen late, where the uterus is much enlarged, its walls probably thinned, and its contractility probably impaired from

overdistention, and where the patient's hemoglobin would indicate that severe hemorrhage could not be withstood, hysterectomy is safer and better, and should be the operation of choice.

Atophan in Gout.

One of the most peculiar of the recently introduced drugs is atophan. If given to healthy individuals in doses of 0.25 to 0.5 grams, it is said to considerably increase the excretion of uric acid in the urine, and after larger doses this action is still evident on the following day. The increase may vary between 30 to 300 per cent., but other constituents of the urine, such as the purin bases and phosphoric acid are not excreted in larger amounts. There is no diuretic effect and the white cells in the blood are normal. If the drug is discontinued, subnormal amounts of uric acid will be passed at first, later normal amounts. If given over a longer period, the amount of uric acid in the urine will always be high. In patients suffering from gout, the effect is the same but more pronounced. The way in which atophan produces its peculiar effect is not yet perfectly clear, but it is likely that it increases the permeability of the kidneys for uric acid, for F. Deutsch could not find larger amounts of uric acid in the blood serum when the drug was given. The drug was employed by the author in 25 cases of acute and chronic gout. In most instances there were no disagreeable after-effects but occasionally the patients complained of gastric distress, sour eructations and diarrhea. Small doses of sodium bicarbonate may prevent the appearance of these symptoms. The average daily dose was 3 to 4 Gms. In acute cases the beneficial influence of the drug was most evident. The fever, swelling of the joints and the pains usually disappear within 24 hours after the drug is given. Frequently atophan gave the patients more relief than the salicylates. In one case of rheumatic periostitis with acute, inflammatory swelling of the periosteum, all other drugs except atophan were useless. The effects are less pronounced in chronic gout and in the secondary lesions of the disease.—Muench. Med. Woch.

Coughs, Colds and Catarrhs.

In all but the most equable of climates, a very large proportion of the population suffers more or less from coughs and colds during the winter months. Many individuals who, at other times, are apparently in excellent health, contract a cold almost as soon as the cold weather commences, and are scarcely convalescent before another

attack occurs, until a sub-acute or more or less chronic naso-pharyngeal catarrh is established which is not thrown off until the spring opens. The frequency of such respiratory affections during the winter months is no doubt mainly due to surface chilling from frequent exposure to changes of temperature and the general lack of adequate ventilation of artificially heated houses, stores, offices and schools. Insufficient oxygenation, the longer "housing up" of the individual and the indisposition to open air exercise in cold weather undoubtedly serve to reduce the general vitality and the respiratory mucous membrane becomes less resistant and more readily subject to infective and catarrhal influences. When (as is usually the case) the patient cannot correct the unhygienic conditions referred to, it is the part of wisdom to tone up the general vitality of the patient and thus render his respiratory tract more resistant to malarial influences. This can best be accomplished by prescribing Pepto-Mangan (Gude) as soon as the more acute symptoms have disappeared. A thorough course of treatment with this efficient blood builder and general tonic reconstructive very frequently places the patient in a position to successfully ward off further catarrhal attacks.

Treatment of Hemophila.

A boy 5 years old suffered a slight injury of the gum which was followed by uncontrollable hemorrhage. Vinegar and styptic cotton were first employed; later, salt, calcium chloride in 4 per cent. solution, adrenalin, compression and injection of 10 per cent. gelatin and diphtheria antitoxin. Even cauterization had no effect. The hemoglobin dropped to 25 per cent. and the child became weaker day by day. As a last resort, 200 Cc. of blood were withdrawn from a healthy individual and after defibrination and dilution up to 750 Cc. with sterile saline solution, were injected at body temperature into a vein of the child. The operation lasted about 45 minutes and was followed by immediate improvement in the pulse and general condition of the patient. The following day there was a rise of temperature, but by the third day the fever had disappeared. Five days later the spleen and long bones were exposed to the Rontgen rays for five minutes every third day, as in leukemia. After the third exposure, the examination of the blood showed hemoglobin 60 per cent. while microscopically many nucleated reds were present. W. Schilling believes that in every severe case of hemophilic bleeding infusion of blood and X-ray exposure should be resorted to.—Muench. med. Woch.

Charlotte Medical Journal

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EDWARD C. REGISTER, M. D., EDITOR
CHARLOTTE, N. C.

ORIGINAL CAUSES OF DISEASE.

To the recent graduate in medicine, the most common diseases and symptoms are presented for relief. Most of us at such a time prescribe the palliative treatment sought and give ourselves no further concern. But for those of us who wish to go deeper in this work, the thought often comes, "what is fundamentally wrong with this patient? What is back of this attack of acute nephritis or rhinitis, and what advice or treatment can I give him which will prevent him from having the same trouble again, and at the same time prevent his friends from having a similar illness?" Any other method of treatment is unworthy of an intelligent physician.

There are almost as many exciting causes of disease as there are diseases themselves, but lying underneath them are a few great causes which may be grouped under the general heads of "faults of structure" and "faults of habit." Sometimes causes from these two groups act and react on each other. A "fault of structure" sometimes causes a "fault of habit," and vice versa. Disease of the ear is a "fault of structure" and, by resulting in deafness, causes the "habit of inattention." Drunkenness is a habit, but if continued long enough it causes a change in the structure of the liver which we know as cirrhosis. Therefore, after we have cured the patient of the pathological condition for which he comes to us, we ought to subsequently remove the original cause which underlies this condition. In order to do this it will be necessary to get a thorough history of the patient and the patient's family; make a thorough physical examination, and then correct either the "fault of structure or habit" that we find. If a medical practitioner does this, he will be surprised at the permanent benefit which the patient derives, for he will then cure symptoms which he believed did not have the remotest connection with the "fault of structure or habit" he has corrected, and in this way prevent their subsequent occurrence. By this method he will also make a great many discoveries which will be of incalculable value to humanity. As an example of this: Some years ago, a lady of fifty consulted a well known rhinologist for the cure of catarrhal deafness. Double inferior tubinotomy, followed by a Politzer

inflation restored her hearing. For fifteen years she had been suffering from hay fever the year round. She used during that time twenty handkerchiefs a day. During the rest of her life she never had any more hay fever. This taught the medical profession that uninterrupted nasal breathing is an important factor in the cure of hay fever, and from that time it has been with the most advanced men a routine treatment in this disease.

SOME COMMON DRUGS OFTEN CONSIDERED FOODS.

Alcohol, up to a certain amount, may be oxidized and used as food. This amount varies in different individuals, and in the same individual at different times, but the average amount that can be absorbed and oxidized by the blood is about two ounces in twenty-four hours. Any amount beyond this, when not oxidized, circulates in the blood as a drug, and causes the characteristic degenerations in the organs and the nervous system with which we are all familiar. The same thing is true of sugar.

Two other drugs, which are almost universally used as if they were food by civilized people, are coffee and tea. The active principles of these two are identical, and when properly made, therefore, the effects of them may be considered together. To a much less extent the active principles of cocoa are similar, but it contains a fusel oil, which, in addition, causes a tendency to indigestion. The most unfortunate effects of this active principle are, first, the sending of more blood to the nervous system, with the consequent increase of mental and nervous activity, and second, the retardation of metabolism. It is the latter action by which it relieves hunger. Life is really nothing but the ability of cells to break down old tissue and to form in its stead new tissue. These supplementary actions of the cells are what we know as metabolism. The effect of tea, coffee, and alcohol—when used in excess—is therefore to stop the breaking down of old tissue and the formation of new tissue within the body cells. When these are attacked by any noxious influence they have less resistance to it, and the individual succumbs to a disease which, without their persistent former use, he was sure to have thrown off without difficulty. I have in mind a case of an unmarried woman of 65, who consulted a doctor when suffering from muscular rheumatism. A careful history revealed the fact that the only cause of her trouble was that for 30 years she had practically lived on coffee and bread and butter. After trying all sorts of treatments, including Christian Science, she was greatly improved, but

not cured, by massage. The closing years of her life now are absolutely miserable from the excess of a habit which almost all civilized people indulge in to a greater or less extent, which inevitably shortens life, and lessens efficiency.

Tobacco is probably used more than any drug in the world. In order to understand the reason for this, we must understand the effect of nicotine in heightening blood pressure. The most important result of this heightening of blood pressure is the increase of the elasticity of the accommodating apparatus of the eye, which contains no blood vessels and receives nourishment only by constituents which exude from the blood vessels in its meshes. We notice an increase in the use of tobacco with advancing civilization, and the most probable explanation of this seems to be that smoking relieves the eye strain which increases with civilization. Nicotine, being a narcotic, eventually lessens communication between the different parts of the body, and so causes the irregular action of the cardiac systole known as tobacco heart, and the atrophy of the optic nerve which causes blindness. No history of a patient is complete without finding out the amount of tobacco consumed, and also the place where this tobacco was grown. Cuban tobacco evidently contains more nicotine than any other kind, and American tobacco, Philippine tobacco, and Porto Rico tobacco contain decreasing amounts in the order given. Many cases of insomnia can be cured by persuading the individual to smoke a milder brand of tobacco. In treating any patient for any disease whatever, it is therefore essential to find the underlying cause which produces a favorable soil for the exciting cause to act upon.

THE SOCIAL EVIL.

At the present time no question pertaining to public welfare occupies more the attention of medical profession and laity than the problem of the "social evil" and its attendant diseases.

We are inclined to agree with Knopf in regarding the term "evil" somewhat of a misnomer; rather should it be called as he holds an "ill" or "disease"; for it seems to us that a condition such as this, a heritage of centuries, gathering strength with age, until its tentacles are enmeshed in all grades of society, its woeful results, affecting innocent as well as guilty, is more than an "evil," has in truth passed the bounds of a mere "ill" and might well be designated a "disease"; a disease of the body politic. Were it so considered, and the problem of eradication tackled with the same spirit of enthusiasm and insight which hygienists

and sanitarians exemplify in their war against other plagues, painstakingly tracing effect to cause, and exterminating the cause, it is but fair to assume that in time the same result might be obtained, or at least a decided improvement shown over what has been done.

Cause and effect! This is the great question. Many dabblers in sociological subjects, noting but the superficial effects of a world old condition, dogmatically issue the dictum that the entire solution of the question lies in the abolishment of public prostitution. They believe that cutting weeds flush with the ground will prevent the roots from growing. Alas, public prostitution is but the end result! The palpable perceptible sign of an invisible seething social canker. Indeed, this part of the problem is most easily handled, but the uselessness of such methods is too well known to need further condemnation here.

Far more dangerous to the masses and the individual is the enormous prevalence of clandestine prostitution. This is anything but complimentary to American family ethics, and cannot be successfully handled by the police, nor has the church been more triumphant in its efforts.

Reclamation and reformation *may* help those already fallen, but do not in themselves prevent the making of new prostitutes. Prevention through education is the rational panacea. Let the public, young and old, be taught that seduction is the primary cause of this "social disease," essentially due in most instances to a deplorable ignorance on the part of man and maid, of its nearly inevitable toll of physical, mental and moral degeneration; and fostered by such side influences as environment, starvation wages of feminine toilers, extravagance and many others which at once come to mind in this connection.

Let young men be taught that he who seduces a woman is a moral vampire, starting her on a road, the ultimate goal of which is all too frequently harlotism; a crime for which he is answerable to God and man, akin to which murder alone is comparable.

Let young girls be taught that she who is tempted and falls once, more readily falls again, losing moral perspective and self-respect, and thus more easily succumbs to the lure of "the great white way"; stumbling by degrees along the downward path and soon, alas! so very soon, finds herself diseased, aged in her youth, that most deplorable of all beings, a social outcast, a common prostitute.

Let us come out in the open and fearlessly teach our people these things which they should know, the cause—seduction, and the conditions which lead to it, and the

effect—disease, and prostitution. Then, perhaps, when these lessons are heeded we may make some impression on this social orgre.

At least let us impress indelibly upon the public the one great undeniable truth that sexual intercourse is unnecessary to health. Personally we believe that so long as the sexual instinct remains a dominant factor of life, absolute social purity will remain as it has in the past—a phantom. Improvement is the best that can be expected; but what can be done and must be done is to prevent young men from bringing the consequences of their sexual misdemeanors to the marriage couch. This alone is a great step in the right direction.

Education is the crying need of the times. And not until the individual is made to understand the true cause, and to appreciate the consequences of his own willful acts, can we hope for much improvement in the so-called "social evil."

METHODS OF FACILITATING LABOR.

The matter of what in the way of remedies and general measures may be safely and conservatively employed with a view to stimulating a tardy or non-progressive labor is a rock on which many opinions divide. As a rule, physicians attempt to maintain a "masterly inactivity" and let the labor proceed in its own good time and way. The man who is engaged in this work year after year learns in time that certain agencies and certain conditions in which the woman is placed favor and facilitate the progress of labor, while conversely other things retard it. If the first stage of labor has set in, then it is that the accoucheur must map out his line of procedure. Much may be learned from the history of the case, provided she has previously borne children. It is not a sure criterion, of course, but a woman who has a tough labor once or twice is probably not going to get through in a jiffy at the next confinement. Certain families are also conspicuous for tardy labors. The woman's pelvis, her muscular development, her general health and many other things must be weighed and considered for what they are worth in estimating the probable character and duration of the labor.

After being many years at the game I am fully convinced that ordinarily it is best to keep the woman on her feet or knees a goodly portion of the time until the labor is well advanced. In this position—the pelvis upright—we get increased pressure and wedge-like action on account of increased cephalic and hypostatic congestion. There is seldom a contraindication for the woman stirring about.

Labor is often retarded by a weakness of the general or peripheral circulation. Every woman seems instinctively to know that the pains are in a measure futile if the feet are cold. A pediluvia in mustard water and a drink of hot tea often turns the course of a stubborn labor into one that is gratifying to all parties concerned. Sitting over steaming water is a remedy of our grandmothers and one not to be despised. It aids in relaxing the soft parts and in some manner seems to add strength to the pains. The sitz bath is highly useful in stubborn labors but it must be used thoroughly—an hour or more—to get certain results from it.

If the dynamics of the uterus are not all that may be desired a few full doses of quinine may set things right. Strychnine hypodermically is occasionally of value. If the pains seem to be held back on account of gas on the stomach a hypo of apomorphine may clear matters up. I have often terminated labor by a capsule of ipecac. The woman will attribute her sick stomach to the natural course of events.

Nearly everything is "good for" rigid os. After all I doubt whether much of anything can supersede morphine and chloroform and perhaps occasionally apomorphine. Very often a tardy condition attributed to rigid os may be due to a full rectum and an enema may in such work wonders. Chloroform has given me good results in nine out of ten cases when used to blunt the woman's suffering and encourage normal labor. It should not, as a rule, be employed until the uterus is well along in the act of dilating or it may possibly bring on a state of passivity in that organ. On the other hand I have found a slight dilatation which persisted for hours to be at once improved by a little inhalation of chloroform. The woman who has been given the beneficent effects of a certain measure of anesthesia in one labor will call for it in subsequent labors.

Rupture of the membranes is a procedure that is usually unnecessary, as the "bag of waters" ordinarily serves a useful purpose. Often, however, it is necessary to rupture the membranes in order to allow the head to engage and the uterine expulsive forces to exert themselves to any advantage. A large quantity of amniotic fluid precludes the descent of the presenting part and if neglected or left to nature to rectify may allow the labor to go on without results for hours.

The physician should see that his obstetrical armamentarium is full and complete before attending a case of labor. Take along the whole thing except the murderous craniotomy forceps. You will have time to send for such instruments while you are

getting other doctors on the ground. Besides you will probably never be compelled to engage in a procedure so hideous.

Editorial News Items.

Dr. Charles T. Harper's Sanitarium.

A booklet descriptive of Dr. Charles T. Harper's Sanitarium, located at Wilmington, N. C., has recently been sent to this office, and we take pleasure in reprinting the following lines from the booklet:

Harper's Sanitarium was first constructed in 1910 for the sole purpose of building a modern and home like retreat for Dr. Harper's private patients near his residence on South Front Street, but at the request of some of his professional friends to allow them the privileges of the building, he decided to open it to all the members of the profession and as a result the capacity of the building has been severely taxed.

The encomiums the institution has received from the profession, their patients and friends has caused him to enlarge the building, thereby more than doubling its capacity and making it more up to now in its appearance and appertinances.

The building as now constructed is a three story brick and metal structure situated on the north-east corner of Front and Castle streets facing the west and overlooking the Cape Fear river, and is devoted to the treatment of medical and surgical diseases only, and can accommodate 32 patients.

No mental, alcoholic or drug habitue taken for cure.

The building is heated by steam; has electric call bell in each room; lighted with gas and electricity and is splendidly ventilated as each room is an outside room and with iron enameled beds, comfortable mattresses and springs and an abundance of air and sunshine making it homelike for convalescents.

The building is easily accessible to the profession, patients and friends, being situated on the Belt and South Wilmington street car lines, and friends of the patients may be admitted to the private rooms at any time of the day or night at the request of the attending physician.

The operating room is on the third floor in the north-east corner and is well lighted by sky-lights and windows, the floors and walls are tiled, the wood-work enameled, and every effort is made to keep this room aseptic.

The institution is equipped with pressure sterilizer, and an abundance of modern surgical instruments, and appliances for diagnosing and treating diseases, includ-

ing all electrical currents and X-ray for picture work. The laboratory equipment is complete with apparatus and reagents for the scientific examination of blood, urine, feces, sputum, stomach contents, histological and pathological specimens.

As careful nursing is all important to the comfort and welfare of sick people, provision has been made for a sufficient number to take care of all patients, and the nurses are under the direct supervision of an experienced graduate nurse.

Dr. Ferrell is sending out the following very appropriate card:

THE ADVANTAGES TO THE DOCTOR OF MEMBERSHIP IN THE STATE MEDICAL SOCIETY.

1. The annual transactions of the State Medical Society affords the only permanent record of the profession in the State.

2. The doctor's posterity may suffer disappointment, knowing he was a doctor, if a search of the records gives no information concerning him.

3. A referee for a life insurance company of this State remarked recently that a doctor had lost nearly one hundred dollars in fees in one summer simply because he had failed to pay his Society dues, and as a result had his name omitted from the list of doctors for his county as published in the transactions. The insurance companies in rating doctors count good standing in his County and State Society as fifty per cent.

4. To every member of the Society a copy of the annual transactions is sent, thus giving him a record of the result of the study, research, and experience of the other doctors of the State.

5. Social intercourse brings about a better understanding and fellowship.

The Secretary of the Society will gladly furnish information about the State and County Societies and co-operate in making them more interesting and useful.

Respectfully,

JNO. A. FERRELL,

Sec'y, N. C. State Medical Society,
Sept. 16, 1912.

Raleigh, N. C.

Dr. C. M. Van Poole, of Salisbury, N. C., ex-president of the North Carolina Medical Society, was recently appointed by President Taft, a First Lieutenant in the Medical Reserve Corps U. S. Army. No more appropriate appointment could possibly have been made by the President.

Book Notices.

A Manual of Chemistry. A Guide to Lectures and Laboratory Work for Beginners in Chemistry. A Text-book specially adapted for Students of Medicine, Pharmacy and Dentistry. By W. Simon, Ph.D., M.D., Professor of Chemistry in the College of Physicians and Surgeons, Baltimore, and in the Baltimore College of Dental Surgery; Emeritus Professor in the Maryland College of Pharmacy; and Daniel Base, Ph.D., Professor of Chemistry in the University of Maryland. New (10th) edition, enlarged and thoroughly revised. Octavo, 774 pages, with 82 engravings and 9 colored plates, illustrating 64 of the most important chemical tests. Cloth, \$3.00, net. Lea & Febiger, Philadelphia and New York, 1912.

The degree of approbation accorded this work by the medical, dental and pharmaceutical professions is shown by the demand which has exhausted nine previous editions, each in several large printings. This new revision makes its appearance at a most opportune season—namely, when students are about to begin the academic year and when physicians, dentists, pharmacists and chemists are preparing for their winter's work. The manual still preserves the plan and characteristics which have won for it its greatest popularity. Numerous additions have been made, most of which are of fundamental importance and again bring it abreast of modern thought in chemistry. Ionic relations are discussed in practically every chapter on acids and the metals, and a number of compounds have been added to the sections on inorganic and organic chemistry. The section on physiological chemistry has been rewritten and brought in line with present-day knowledge and theories. Special care has been taken to introduce here the most modern methods for chemical examination in clinical diagnosis. The facts and data which are of direct interest to the physician, pharmacist and dentist have been placed in the foreground.

A Treatise on Diseases of the Hair. By George Thomas Jackson, M.D., Professor of Dermatology in the College of Physicians and Surgeons, Medical Department of Columbia University, and Charles Wood McMurtry, M.D., Instructor in Dermatology in the College of Physicians and Surgeons, Medical Department of Columbia University, New York. Octavo, 366 pages, with 109 engravings and 10 colored plates. Cloth, \$3.75, net. Lea &

Febiger, Philadelphia and New York, 1912,

Nearly every human being has some defect or slightly abnormal condition of the hair or scalp which, if it had received proper attention at the right time, might have been either cured or prevented. In spite of the great discomfort and the even greater disfigurement which many of these irregularities produce, and the intense suffering which nearly always results from the more severe diseases of the hair or scalp, they have not received, until recently, the study and investigation which their importance merits. For this reason there has grown up about them a tangle of erroneous ideas which has obscured the truth. The result is that the average physician feels himself helpless and hopeless when confronted with a case of this type. In recognition of the need for an adequate presentation of this important subject, Drs. Jackson and McMurtry have created the first work in this field which may justly claim to be authoritative, scientific and thoroughly practical. The sections on diagnosis and treatment have been made full and precise, and have been prefaced with a discussion of the pathology of the disease under consideration. The latest researches are included. An especially attractive feature has been made of the illustrations and colored plates.

Elementary Bacteriological and Protozoology: the Microbiological Causes of the Infectious Diseases. By Herbert Fox, M.D., Director of the William Pepper Laboratory of Clinical Medicine in the University of Pennsylvania. 12mo, 237 pages, with 67 engravings and 5 colored plates. Cloth, \$1.75, net. Lea & Febiger, Philadelphia and New York, 1912.

This work is designed as an elementary text-book of Bacteriology and Protozoology for nurses and for beginners. Without being technical, it gives a good idea of the nature of micro-organisms, and then discusses with more emphasis the ways in which bacteria pass from one individual to another, how they enter the body and act when once within, and their manner of exit. Such general information concerning the character of the disease process has been included as seemed necessary to clarify the nature of microbe action. Indeed, the subject-matter in many places is but elementary bacteriological pathology. In other words, the author has endeavored to show in the simplest manner how bacteria produce disease.

The Book of Live Stock Champions. Being an Artistic Souvenir Supplement to the Monthly National Farmer and Stock

Grower. Compiled and Published by Philip H. Hale, Editor and Manager, St. Louis, Mo. Complete Volume, 1912.

This is a new edition of the most valuable book ever published in the interest of high-class stock raising. The pictures in *The Book of Live Stock Champions* are of famous animals. There are sweepstakes and championship winners at State, National and International Fairs and Expositions. These include individual awards in breeders' competitions, also herds with prize-ring honors; the beef cattle include grand champion steers and car-loads; the dairy cattle include record makers and large producers of milk and butter; the horses include thoroughbred, trotting, coach, draft, hunters, ponies, jack stock, etc. Hags, sheep and goats are represented by the best in every breed. The book is elegantly bound in blue cloth, 352 pages, with nearly 750 separate and distinct illustrations, one, two, five or more champions to the page.

There is not a second-class animal or inferior picture in the book. Every animal is a record-maker, record-breaker, famous sire, mother of champions, or winner in the prize ring.

Mind Cure and Other Essays. By Philip Zenner, A.M., M.D., author of "Education in Sexual Physiology and Hygiene." Cincinnati: Stewart & Kidd Co: 1912.

The contents of this volume are as follows: Mind Cure; Prevention of Nervous Diseases—Training the Child; Treatment and Prevention of Alcoholism; Social Disease—Woman's Problem; Defectives; Medical Inspection of Schools and the School Physician; A School for Truancy; Eugenics; The History of a Book.

Medicine today is more distinctively preventive medicine than in any period of its past history.

The volume is largely devoted to school life and to prevention of diseases by means of the training and instruction of children.

The volume is a series of Essays, most of which were originally addresses delivered to educational organizations, and the book has and will meet with the approval of the medical profession and the laity.

The publishers have spared no pains on their part, and the book is neat, attractive and valuable.

The Physiology of Faith and Fear, or The Mind in Health and Disease. By William S. Sadler, M.D., Professor of Physiologic Therapeutics The Post-Graduate Medical School of Chicago; Director of the Chicago Institute of Physiologic Therapeutics; Member of the Illinois State Medical Society; The American Medical

Association; The American Association for the Advancement of Science, etc., etc. Author of "The Science of Living, or, The Art of Keeping Well," "The Cause and Cure of Colds," etc. Illustrated. Second Edition. Chicago: A. C. McClurg & Co. 1912.

We are now passing through a period of popular reaction against the scientific materialism of the last century. The common people are awaking to the fact that the mental state has much to do with bodily health and disease.

The contents of this volume are as follows:

Part I, Psychologic Section; Part II, Physiologic Section; Part III, Therapeutic Section. These different parts are taken up and discussed from a scientific standpoint.

There are an immense number of plates and cuts illustrating the text, which seem to be properly inserted, and add much to the clearness of the subject discussed.

We take pleasure in recommending this volume, which is well bound and carefully gotten up, to our readers, and to the medical profession, and also to the laity.

Sex Hygiene for the Male and What to Say to the Boy. By G. Frank Lydston, M.D., Professor of the Surgical Diseases of the Genito-Urinary Organs and Syphilology, Medical Department State University of Illinois; Member of the American Medical Association; Member of the American Urological Association; Member of the Society of Authors of London, England; Author of "Diseases of Society," "The Blood of the Fathers," etc.; Delegate from the U. S. Government to the Congress for the Prevention of Infectious Diseases, Brussels, Belgium, etc., etc. Illustrated with 24 Engravings. Chicago: The Riverton Press. 1912.

This book is not intended for reading by very young boys in grades below the high school. In a general way it may be said that education in sex hygiene at present must begin at the top. The teacher, the parent and other adults must be taught first, the young persons afterwards.

It is the earnest desire of Dr. Lydston that this book may aid physicians and teachers in answering the question so often asked: "What book on sex matters shall I read and give my son to read?"

The Charlotte Medical Journal take great pleasure in recommending this work to the public.

The illustrations are most excellent, the binding and printing is above the ordinary, and in every way the volume is both attractive and valuable.

International Clinics. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles, by Leading Members of the Medical Profession Throughout the World. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, U. S. A., with the collaboration of John A. Witherspoon, M.D., Nashville, Tenn. Volume III. Twenty-second series, 1912. Philadelphia and London: J. B. Lippincott Company. 1912. Price \$2 00.

This volume embraces articles upon the following subjects: Treatment, Medicine, Surgery, Neurology, Pædiatrics, Obstetrics, Gynæcology, Orthopædics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to students and practitioners.

These articles are all of a very high grade, and in every sense up-to-date.

The volume is substantially bound, and the illustrations are of a very high type.

Progressive Medicine. A Quarterly Digest of Advances, Discoveries and Improvement in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. September 1, 1912. Lea & Febiger, Philadelphia and New York. Six dollars per annum.

The contents of this volume are as follows: Diseases of the Thorax and Its Viscera, including the Heart, Lungs, and Bloodvessels; Dermatology and Syphilis; Obstetrics; Diseases of the Nervous System. All these articles are carefully prepared, and show careful study on the part of the authors. Many illustrations appear in the text, which add much to the value of the work.

Lateral Curvature of the Spine and Round Shoulders. By Robert W. Lovett, M.D., Boston, Assistant Professor of Orthopedic Surgery, Harvard Medical School. Associate Surgeon to the Children's Hospital, Boston; Surgeon to the Infants' Hospital, Peabody Home for Crippled Children, and Massachusetts Hospital School, Canton; Member of the American Orthopedic Association; Korrespondierendes Mitglied Der Deutschen Gesellschaft für Orthopädische Chirurgie, Socio della società Italiana Di orthopedia. Second Edition. Revised and Enlarged, with 171 illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut St. 1912.

In preparing the second edition of this

book the author has found it necessary to rewrite several parts of it in order to keep pace with the progress made in certain aspects of the subject in the last few years.

The table of contents follows: Chapter I, The Anatomy of the Vertebral Column and the Thorax; Chapter II, The Movements of the Spine; Chapter III, The Mechanism of Scoliosis; Chapter IV, Description and Symptoms; Chapter V, Examination and Record of Scoliosis; Chapter VI, Pathology; Chapter VII, Etiology; Chapter VIII, Occurrence; Chapter IX, School Life and Scoliosis; Chapter X, Diagnosis; Chapter XI, Prognosis; Chapter XII, Treatment; Chapter XIII, Faulty Attitude.

This book shows extraordinary work on the part of both the publishers and illustrators. It is a pleasure to us to review a book of such vital importance and value to the medical profession.

The Practitioner's Encyclopædia of Medicine and Surgery in all Their Branches. Edited by J. Keogh Murphy, M.C. (Cantab.), F.R.C.S., Surgeon Miller General Hospital for South-East London, Senior Assistant Surgeon to Paddington Green Children's Hospital. London: Henry Frowde, Oxford University Press; Hodder & Stoughton, Warwick Square, E. C. 1912.

This is one of the most complete Encyclopædia that has been reviewed in this Journal for many years. It seems to include in a compact, practical form articles which convey the latest information. But few anatomical and pathological details will not be found in these pages.

The encyclopædia is arranged under sections familiar to the practitioner, so that he may find it easy to refer to its pages in cases of medical and surgical and other difficulties, whilst the index provides the fullest possible cross references. The book is well bound, and will be found of unlimited value to the medical profession.

The Surgery of the Rectum for Practitioners. By Sir Frederick Wallace, M.B., B.C., (Cantab.), F.R.C.S., Surgeon to Charing Cross Hospital, St. Mark's Hospital, and the Grosvenor Hospital for Women and Children. London: Henry Frowde, Oxford University Press; Hodder & Stoughton, Warwick Square, E. C. 1912. Price, \$5.50.

This book is an enlarged edition of the one published by the same author in 1906, and its aim is the same, viz.: to present the surgery of the rectum of the present day in a practical and condensed form to young surgeons and practitioners.

A considerable advance has been made

in the treatment of rectal ulceration and also in the treatment of fistulæ. In fact, in all the ordinary diseases of the rectum the treatment has been modified and improved to a considerable extent.

This work is divided into the following chapters: Chapter I, Anatomy of the Sigmoid and Rectum; Chapter II, The Examination of Patients and Symptoms of Rectal Disease; Chapter III, Catarrhal and Inflammatory Diseases of the Rectum, Sigmoid and Colon; Chapter IV, Subacute Colitis, Sigmoiditis, and Proctitis; Chapter V, Ulcerative Colitis, Sigmoiditis, and Proctitis; Chapter VI, Venereal Diseases of the Rectum and Anus; Chapter VII, Diseases of the Perianal Region; Chapter VIII, Anal Fissure, Intolerant Ulcer, Irritable Ulcer; Chapter IX, Pruritus Ani; Chapter X, Ano-Rectal Ulceration, and Submucous Tracks; Chapter XI, Rectal and Peri-rectal Abscesses connected with the Rectum and Anus; Chapter XII, Rectal Fistulæ; Chapter XIII, Hemorrhoids; Chapter XIV, Prolapse and Procidentia; Chapter XV, Neoplasms of the Rectum; Chapter XVI, Carcinoma of the Rectum; Chapter XVII, Excision of the Rectum; Chapter XVIII, Colostomy; Chapter XIX, Rectal Diseases in Children, Including the Ordinary Developmental Defects.

The volume is well bound, and shows no lack on the part of the publishers to make the book thoroughly up-to-date.

Consumption in General Practice. By H. Hyslop Thomson, M.D., D.P.H., Medical Superintendent Liverpool Sanatorium. Henry Frowde, Oxford University Press; Hodder & Stoughton, Warwick Square, E. C. 1912. Price, \$5.50.

For the present edition the book has been entirely re-written, and much new matter dealing with improved and modern methods of diagnosis and treatment has been added.

This volume is divided into three sections as follows: Section I, Diagnosis; Section II, Prognosis; Section III, Treatment.

This work is in a condensed, concise form, and includes all the important phases of consumption. Many unimportant and minor details have, however, been left out purposely.

The volume is beautifully and substantially bound, and contains several well drawn charts. We are glad of the privilege of recommending this work to our readers.

Manual of Surgery. By Alexis Thomson, F.R.C.S., Ed., Professor of Surgery, University of Edinburgh; Surgeon Edinburgh Royal Infirmary, and Alexander Mills, F.R.C.S., Ed., Surgeon Edinburgh Royal

Infirmary. Volume second. Regional Surgery. Fourth Edition Revised and Enlarged with 274 illustrations. Edinburgh, Glasgow, and London: Henry Frowde, and Hodder & Stoughton. 1912.

Children—Their Care and Management. By E. M. Brockbank, M.D., (Vict.), F.R.C.P., Honorary Physician, Royal Infirmary, Manchester. London: Henry Frowde, Oxford University Press; Hodder & Stoughton, Warwick Square, E. C. 1912.

A Magazine Which Never Disappoints.

Lippincott's can always be relied on for good fiction—fiction which is not only clever in form, but which—a vastly more important item—touches live sentiment. The October issue is noteworthy in several respects. For one, it contains a complete novelette of swift movement and compelling interest, by a famous British author, H. B. Marriott Watson, whose books, "Hurricane Island," "The Big Fish," and a dozen more, have won him deserved success on both sides of the Atlantic. His new story, "The Picaroon," describes the surprising things that happened to an audacious, resourceful young yachtsman who believed in taking "short cuts" when he wanted anything. In this instance, he gets what he desires, although he has to surmount many formidable obstacles first. The heroine is a Countess as well as an extremely nice girl, and we don't in the least blame the hero for seeking to win her, although we may not altogether approve of his viking-like methods.

Arthur Morrison, author of "Tales of Mean Streets," "Green Ginger," and other widely read books, contributes a characteristically good story of low life in London, entitled "Lies Unregistered." Its characters are of much the same type as the petty gamblers, gangsters, and gunmen who have caused so much trouble in New York. John Reed Scott, writer of "The Colonel of the Red Huzzars," "The Last Try," and other "best-sellers," stands sponsor for "A Quarter-to-Eight," a short-story of society, so fresh and witty that even the jaded reader will be eager for its uncommon situations and straightforward people. Other short-stories to be commended are "An Optical Delusion," by Lowell Edwin Hardy; "In Such a Night as This—," by Atkinson Kimball; "Discipline," by Frank E. Verney; "Among Thieves," by Robert Adger Bowen; "At the Stroke of the Clock," by Joseph Hornor Coates; and "The Catch of the Season," by Mabel Moore Macdonald.

As there is at least a possibility of the United States' becoming involved in a war

with the turbulent republic to the south of us, Forbes Lindsay's article on "The Prospect for Mexico," has an especial timeliness. Edward Sherwood Mead, the financial expert, discourses on "How the Investment Banker Investigates Public Utilities." The following brief but trenchant papers will be found in the department, "Ways of the Hour": "Not Tired of Democracy," by George L. Knapp; "On Keeping Your Temper," by Thomas L. Masson; "Why Is a President?" by Clifford Howard; and "Country Schools for City Boys," by L. R. B.

"Walnuts and Wine," Lippincott's big humorous department, is full of new jokes, jingles, and anecdotes; Churchill Williams's automobile department, "Twentieth Century Travel," tells things of interest to the motorist; and "Investments" answers the questions of would-be investors.

Clinton Scollard, Alice E. Allen, William Wallace Whitelock, Emily Sargent Lewis, Arthur Wallace Peach, John Northern Hilliard, Sara Teasdale, and others have worthwhile poems in the number. Ellis O. Jones's offering is a pungent little sketch on "True Love." Altogether the contents are of unusual variety and quality.

From Peru to Liverpool For a Hospital Operation.

Ten years from now it is pretty certain that the Senora de Fernandez would not have been compelled to go more than half way round the world in order to reach her home in Lima, Peru, after her sojourn in Iquitos, also in Peru and only 635 miles from the parental roof. When she became so ill that an operation was necessary, her husband was unable to accompany her because his gunboat had added to its usual troubles with rubber smugglers a near-war with Ecuador and Brazil, all fiercely interested in their lowland boundaries the moment that rubber had become a magic word for giving white men courage to enter the fever-laden jungles of the Upper Amazon. Without any companion, therefore, she must go to the operating table that can be reached with the least change. The direct way—over the Andes—to Lima is, of course, unthinkable except upon the condor's wings. By the route next shortest—over which she had come—the home trip would require at least four changes—one at Para at the river's mouth; another, at least, and probably two, in Venezuela and the West Indies; again at Colon on the Isthmus, and then finally at Panama for the boat to Callao—unthinkable for an invalid.

But the rubber depot of the Upper Amazon basin does connect directly with skilled

surgeons at one place. From Liverpool come on regular schedule freight boats of ocean-going register. These find no embarrassment as they enter that monster of rivers and, propelled by their twin screws and your or your neighbor's demand for a new set of tires, continue on and on toward the Pacific till, 2300 miles upstream, they reach Iquitos. Even there they disdain to anchor, but calmly warp themselves into their assignment at the dock! As if an ocean liner should some day merely toot a formal salute to Miss Liberty and cooily sail past New York on up the Hudson (if your imagining is good) until it should come alongside at Denver, Colorado!

On such a boat the brave little Madam was put—sick almost unto death and without another woman on board. After a weary 7000 miles, or thereabouts, she was met by the ambulance and taken to one of the great Liverpool hospitals—and to health. A few weeks later saw the continuation of her homeward journey—a matter of 3200 miles to New York, 2000 more to Colon, fifty more along the Canal to Panama, thence 1500 to Callao, with, finally, nine more (by trolley) to Lima and home! Nearly 14,000 miles of water and fifty-nine of land in order to go from an Atlantic to a Pacific port of the same country! Truly trade and transportation routes be arbitrary masters!—From "Panama and the Parallels of Latitude," by Charles Whiting Williams, in the American Review of Reviews for October.

Abstracts of the Leading articles of the month.

Multiple Sclerosis.—Flatau and Koeppen (Archiv. f. Mikrosk.) have the following to say:

For a long period we have had a general knowledge that the lesions in multiple sclerosis were in some way or another associated with the blood vessels. In a number of the cases, vascular changes were very evident, not only in the sclerosis patches, but also in regions where no sclerosis was found. These changes consisted in dilatation of vessels into blood spaces, thickening of the media and adventitia, and widening of the perivascular spaces with blood extravasation, and thrombotic softenings. The axones in the patches were bared of myelin, and their number was clearly diminished. They were narrow, and distorted, both in shape and course, and their staining capacity was diminished. Both above and below the patches the axone be-

came more normal again. From this fact it is concluded that the axone is able to undergo grave chemical changes in the patch without being completely destroyed. In some of the cases, marked secondary a generation was seen in the lateral pyramidal tracts, and in the dorsal columns. The nerve cells showed, in numerous places, distinct disturbance, such as diminution in number, shrinking, increase of pigment, eccentric position of the nucleus and a poverty of fibrils. In some of the cases the roots and peripheral nerve stems showed diffuse myelin degeneration, with a distension of the vessels and thickening of their walls. The changes in the membranes of the brain and cord affected only the pia, which was thickened, adherent to the subjacent nervous matter, and contained dilated blood vessels and occasional hæmorrhages. The patches occur under the influence of an hitherto unknown toxin, which acts upon the nervous system through the blood vessels.

A Case of Sarcoma of the Prostate.—Pleschner (Wiener Klin. Woch.) says that sarcoma of the prostate is a rather rare condition, but 36 undoubted cases have been reported in the literature. The author's case was that of a man 54 years of age, who was suddenly seized with an attack of complete retention one year before admission. These attacks were repeated at frequent intervals, requiring catheterizing for relief; the patient's chief complaints were difficulty of urination and defecation, with some loss of weight. Physical examination showed a tumor over the symphysis the size of a fist, while rectal examination revealed a very large mass, fluctuating at its lower pole. Cystoscopy and X-ray examination showed the presence of a large tumor bulging into the bladder. The tumor was removed by the sacral route, and upon histological examination proved to be a small spindle-cell sarcoma. From the operative findings it was presumed that the growth was of prostatic origin involving mainly the right half of the gland.

Care of the Teeth in Children.—Shenman, in The London Lancet, contributed a paper on the care of the teeth in relation to the health of children at the school ages—the provision of special school dental clinics. He said. Instead of toothache being the sole condition which requires the attention of dentists we are now beginning to realize more clearly the influence of dental caries in the production of oral sepsis, alveolar abscesses and of such habits as food-bolting. We are also becoming convinced that caries is almost certainly of etiological importance in inflammation of the tonsil,

digestive disturbances, gastric catarrh and ulceration and severe anemias. It probably also has an influence in the causation of peripheral nerve irritation, certainly of neuralgia, and even of epilepsy.

An individual with carious teeth is incapable of masticating his food sufficiently or of impregnating it well with the salivary juices. Food incompletely masticated remains longer than it should in the stomach; fermentative changes may arise in it and digestive disorders and gastric catarrh follow. The converse proposition that "malnutrition affected the condition of the teeth" is not necessarily true. Perfect teeth are seen occasionally in children who have never used a toothbrush and who live under the most unfavorable conditions.

A Contribution to our Knowledge of the Naevus-Xantho-Endotheliomata.—McDonagh (British Journal of Dermatology) reports five cases, all in children, and sums up the bibliography on the subject. In three of the cases, the only ones followed, spontaneous cure resulted. The mother of one child had had similar tumors from birth to the age of 14 years. The lesions varied in time of appearance from birth to three weeks after delivery. The site of election was the face, though lesions appeared scattered over all parts of the body. The lesions varied in size from one quarter inch to one-half inch in diameter. They were slightly raised above the surface, were firm, and moved with the surrounding skin. The early lesions were reddish brown, their centers a little depressed, and along their edges vessels could plainly be seen. Microscopically "there is a dense cellular growth most marked in the deeper layers of the skin, the cells of which take their origin from the endothelium of the capillaries. Then many of these cells disappear while new-formed connective tissue takes their place. It is in this stage that the giant cells are to be seen, some of which are formed by the endothelial cells blocking a capillary, because some which are not completely blocked contain red blood corpuscles; these giant cells are seen under the epidermis, others—and these occur deeper in the corium—are formed by the fusion together of some of the cells of the growth. The grouping together of a dozen or more cells is probably caused by the growth of fibrous tissue which separates them. The cells contain fat. This is the stage in which the lesion microscopically resembles a soft fibroma or connective tissue tumor. On careful examination of the cells at the base of a tumor removed in this stage, some are found to have swollen and taken on the appearance of the honey combed cells to be now described. These

cells contain less fat than those met with in the upper layers of the skin, and the fat appears in the form of granules only. The stage further is when all the cells are swollen, contain one or more nuclei well outlined by a strand of connective tissue, and have the honey combed appearance. It is now that the new vessels appear so prominent, and signs of inflammation as a small round celled infiltration are to be seen. The final stage is when these cells also disappear."

Blood Pressure in Diphtheria.—Rolleston (British Journal of Children's Diseases) says that blood pressure in diphtheria is almost invariably low and bears a direct relation to the severity of the disease. There is, however, no exact relation between blood pressure and pulse rate, though highest blood pressure, like highest pulse rate, occurs in the first week and lowest in the second week. In early paralyses there is a lowering of blood pressure, but in late palsies, i.e., after the second week, a fall in pressure was exceptional. In this observation he fails to confirm Kolossova's, that a fall preceded the occurrence of palatal and ciliary paralyses.

While blood pressure is of assistance in prognosis, it is by no means indispensable.

(1) In 179 cases it was subnormal, 351 per cent., extent and duration having a direct relation to severity of faucial attack.

(2) Highest reading in first week, with lowest in second and return to normal by the seventh.

(3) Reading, in recumbent and erect positions the same, in convalescent cases or recumbent higher if any variation.

(4) Laryngeal cases showed disproportionately high readings. Tracheotomy followed by immediate drop.

(5) Early serum phenomena showed little tendency to vary pressure readings.

(6) Albuminuria was accompanied by fall or no change except in uremia.

(7) Adrenalin therapy may favorably influence symptoms without affecting readings.

Dull and Backward Children.—Friedgold (British Journal of Children's Diseases) says that the ratio of dull and backward children is relatively 10 per cent.

Causes.—Heredity and environment. (1) General state of health in developmental period. (2) Impressions reaching brain through special senses.

Varieties.—Innate dullness, good physical development, healthy, usually children of agricultural laborers, are no more "mental defects" than persons having no taste for music or art. (a) Acquired dullness, backward through lack of opportunity, irregular school attendance, etc. (b) Due

to partial blocking of sensory avenues, defective vision or hearing. (c) Defective development through malnutrition or disease.

Proper attention to the individual training of Group 1 will develop them in practical lines, as they are not usually suited for more advanced education. As to Group 2, correction as far as possible of physical errors and "required attendance" at school limited to capacity for development. Fitting the child for the syllabus not the syllabus to the child is wrong.

Treatment of Opium Poisoning.—Taylor, in The London Lancet, reports two cases of acute opium poisoning in which he believes recovery was due in great measure, if not entirely, to prolonged application of the faradic current. Small, moist electrodes were used, the object being, not merely to stimulate the sensory terminals in the skin, but to cause muscular contractions in the trunk and limbs. The stimulations were continued in the first case for forty minutes, in the second for fifty minutes, and seemed to contribute directly to the disappearance of somnolence, and, in the second case, to restoration of the respiratory function, though artificial respiration was employed simultaneously. He advises that whenever opium causes somnolence from which the patient cannot be aroused by shaking, the faradic current should at once be brought into use, and even though the breathing becomes slow and gasping, should be persevered in until the patient is finally roused and the respiration restored nearly or quite to the normal. Artificial respiration should also be performed, but the author is convinced that the faradic current is a valuable addition to it.

Infantile Beri Beri.—E. Calderon (Bulletin of the Manila Medical Society) gives an account of a disease called "Taol" or "Taon," which is very prevalent in the Philippine Islands, and destroys many infant lives. Formerly the disease, which is of a convulsive nature, was looked upon as an eclampsia of infants, but it appears that, in 1904, Guerrero showed the complaint is really a form of toxemia, identical with that of beri-beri, transmitted through the mother or wet nurse by the milk. It also seems that in Manila breast-feeding is far more common than in many countries. Acting on this notion, institutions for the free distribution of sterilized milk have been opened with most gratifying results. It is important to correlate such facts as these with what is known, or hinted, as to the presence of thyroid substances in mother's milk, and it is possible that we may have

to recognize, more fully than at present, the influence on the child of conditions affecting the maternal metabolism.—Universal Medical Record.

Concerning Prostatectomy.—Favento (Wiener Klin. Woch.) reports a series of 83 prostatectomies. 12 being operated by the perineal route, the others suprapubically. Of the 12 perineal cases 2 died; the suprapubic operation gave a mortality of 16.9 per cent, most of the patients succumbing to a pyelonephritis. Spinal anesthesia was employed with excellent results. After the prostate was enucleated, the cavity was packed with gauze and a drain inserted, which was removed at the end of 8 days, and a permanent catheter then introduced. Potency was retained in many of the case. Carcinoma of the prostate was encountered six times. For the cases with incomplete retention, with dilated bladders reaching to the umbilicus, and suffering from incontinence, immediate prostatectomy was performed without the preliminary gradual emptying of the bladder. These cases, which generally have a very high mortality responded very well to this procedure; but 4 of a series of 17 patients died after the operation. To prevent hemorrhage into the bladder as a result of the sudden emptying, the bladder was packed with 7-8 meters of the sudden gauze, which remained in situ for 4 days.

Diagnosis and Treatment of Sciatica.—Watson (British Medical Journal.) divides the affection in the following manner:

A. Primary group: (1) Sciatic neuralgia. (2) Sciatic perineuritis. (3) Sciatic neuritis.

B. Secondary group.

The primary group includes sciatic neuralgia. This is supposed to be a functional trouble not associated with definite inflammatory change in the nerve trunk, the condition being purely functional. It occurs most frequently in flabby, anemic, debilitated women, being apparently an expression of nervous exhaustion. Occasionally it is associated with dysmenorrhea, or irregular menstruation. He has seen it alternate with facial neuralgia. The pain is intermittent and the patient may be quite comfortable between the attacks.

Sciatic perineuritis or neuritis is a disease of adult life, and in the writer's experience four times as common among men as women. There is almost invariably a gouty or a rheumatic history. In fully developed cases there is muscular atrophy, paresis, with diminution of tactile sensibility, areas of anesthesia and hyperesthesia, tinglings, pins and needles, formication, etc.

The exciting cause of the hyperacute attacks is usually exposure of a limb to cold and wet.

The secondary group of cases includes all those in which the condition is due to involvement of the sciatic nerve, by pressure or the spread of inflammatory processes. Hence the importance of making a complete and systematic examination before diagnosing primary sciatica. It is stated that a rectum overdistended with scybalous masses sometimes exerts sufficient pressure to give rise to sciatica, but whether this be so or not, it is at any rate quiet sufficient to aggravate the condition if already present. It includes those cases of sciatica due to tuberculous or osteoarthritic disease of the spine, bones of the pelvis or hip-joint,

As to treatment, rest in bed is essential and a water-bed is advisable, the sheets being either of wool or cotton and not of linen. Wooden socks and pajamas should be worn. He fixes the limb with a long Liston splint, which adds greatly to the comfort of the patient when he has become accustomed to it, and does away with the startings, which are such a painful feature of the disease. Should this prove unsatisfactory, it should be slung in a fracture cradle. The limb should be kept very warm, preferably swathed in cottonwool. A dose of calomel should be given, followed by a saline in the morning. Salicylates in combination with the bromides and tincture of gelsemium answer well. Aspirin appears to have a specific effect in relieving the pain of fibrositis; and pyramidon, exalgin, acetanilide, and phenalgin are worthy of mention. Potassium iodide is a most valuable remedy, more particularly in chronic cases, especially when combined with the glycerophosphates. Tonics are very necessary when the acute symptoms have subsided.

Regarding local treatment, many pin their faith to fly-blisters; the disadvantage of these is that if not effective they interfere in a measure with the adoption of other methods of treatment. Hot linseed poultices, antiphlogistine, a canvas bag containing mustard bran, electra cloth applied along the course of the nerve, are all good methods of counter-irritation.

Anodyne colloid is excellent for relieving local pain, and morphine is given when required. Cocaine is extremely valuable administered hypodermically in doses of 1-10 to 1-2 grain. It should be injected at the seat of pain, but not into the nerve. The balneological and electrical treatment receive detailed attention. High-frequency and sinusoidal current are indicated without very clear indications as to the selec-

tion of each, as are massage and douching and passive movement. Stretching is advocated as a last resort. As to further treatment, the patient is especially cautioned against sitting on a cold seat of a draughty water-closet, he is advised to use a felt cover.

Death following Salvarsan Injection.—

Moore (Dublin Jour. Med. Science.) Mentions a patient, a man aged 25, had contracted syphilis and gonorrhoea three years before; on coming under observation his condition was diagnosed as early general paralysis of the insane. After being under observation for a few days he was given 0.5 gm. of salvarsan intravenously. There was a severe reaction a few hours later; the temperature rose to 103° F., and there was pain in the stomach, associated with vomiting and diarrhoea. This, however, soon passed off. About five weeks later a similar injection was administered. This was followed by rise of temperature to 105° F. (40.6 C.); pulse weak, almost imperceptible, heart sounds feeble; lips, ears, nose, and nails blue; tremor of right hand, speech indistinct, severe vomiting and diarrhoea, pain in the stomach, head, and limbs, loss of sensation and tingling in the feet, loss of all reflexes except slight clonus in the right leg. Next morning his condition had improved, but there was a relapse later in the day and he died that night. The author maintains that the salvarsan treatment was quite justified and in similar cases he could give it again, only in smaller doses repeated at short intervals.

Labor in Aged Primipare.—Fourdinier (Jour. des sci. med. de Lillie) says that labor has always been prognosis has been given. The author gives the results of observations of primipare from the aged of thirty years to forty-six years at the St. Anne Maternity. Out of 10,000 women in labor 237 were between thirty and forty-six years of age; there were 234 simple and twenty-three twin pregnancies. Out of these, 221 were head presentation, seven breech, and four shoulder. In 172 primipare from thirty to thirty-five years of age, 76 per cent. were normal, twenty-four terminated artificially, the average duration being sixteen hours. There were sixty-five women between thirty-six and forty-six years of age, of whom thirty six were delivered spontaneously and twenty-nine artificially. Of the twenty-nine who were delivered artificially the duration was thirty-two hours on the average. The mortality in this series was 1.53 per cent. for the child. The author concludes that of 100 primipare of advanced age three-quarters will be delivered normally, after a relatively

short labor; but the other fourth will be exposed to the dangers of a long and laborious delivery. The cause seems to be a rigidity of the parts, causing resistance to the contractions, and a degeneration of the soft parts, causing resistance to the contractions, and a degeneration of the muscular fibers of the uterus itself, which renders the contractions less forcible than normal.

Obstetrical Consultations for Infants.—

Bonnaire (Presse med. says that the nursing mother should by thought how to supplement and insufficient supply of milk with artificial feeding with cows milk, or how to improve her general conditions so that the supply of milk will be better in quality quantity. Many mothers are unable or unwilling to nurse their infants. Among the working classes this occurs often necessity, the mother being the bread-winner and forced to go to work daily. She puts her infant in a day nursery and leaves it there during the day, and soon loses the ability to nurse it at all, or gives it up on account of the inconvenience she experiences in not being able to nurse the child during working hours. The obstetrician is able to teach the mother the value of even a small quantity of mother's milk to supplement artificial feeding. This breast milk in small quantity acts as a ferment to assist digestion of the cow's milk. As soon as the mother gives up nursing altogether the child comes under the supervision of the pediatricists. But it is the privilege of the obstetricians to assist materially in the prevention of infant mortality if he can hold and influence these working mothers and induce them to nurse their infants for even a few hours in the day. Pinard has attacked the problem of congenital debility and says "mother's milk is the right of the infant." Budwin says "the best milk is that which the child finds at its mothers breast." If Sunday morning is devoted to such consultations it will much assist the working mother, since she cannot afford to forego her wage while spending her time awaiting the consulting doctor during the week. It is the midwife and the obstetrician who must be instructed in this work, and who must take it up, since it is they who come in contact with the mother at the time of the birth of her child, and who by judicious management can maintain their influence over her for some time, by dwelling on the value of their counsels to the health of her child. A propaganda in favor of nursing of every infant by its own mother can be carried out in connection with every obstetric clinic, and by every physician in his private practice and it is our duty as physicians to see that this

is done if we wish to do our utmost to assist in the reduction of infant mortality.

Lupus Vulgaris and Scrofuloderma Treated by the Pfannenstill Method.

Sequeira reports the case of a poorly developed girl, aged sixteen, whose father was healthy, but whose mother suffered from phthisis. The girl had always been delicate. She had pneumonia when young, and had had measles fifteen months ago. The lupus started upon the back of each wrist eight years ago, and the lesions had been scraped. They gradually spread after the operation, and eventually reached the elbow and the upper arm. A little later the face was affected. Fifteen months ago she had what was described as being a tuberculous abscess behind the left ear. This was opened. Her hearing became affected, and she was very deaf. Her voice was husky. She came to the London Hospital in January, 1912, with extensive lupus of the nasal cavity and of the pharynx and palate. There was also double epiphora. There was extensive lupus, with some central scarring upon the hands and forearms up to the elbow. In February, 1912, the back of the right hand became much swollen and edematous and a localized purplish-red swelling developed over the back of the right wrist. This was 2 inches in its long diameter and $1\frac{1}{2}$ inches transversely. The swelling evidently fluctuated, and it was opened, and a thin yellowish pus was evacuated. Later a small oval swelling formed along the line of the lymphatics. On February 21 she was admitted to the ward, and the arm was put on a splint. The ulcerated areas in the nose were treated by packing with gauze, which was kept constantly moistened with a solution of peroxide of hydrogen 10 vols. At the same time she was given 30 grains of sodium iodide per diem in divided doses. The tampons soaked with the peroxide were kept constantly in position, except when the patient was asleep. Finding so much improvement of the intranasal condition in this as in numerous other cases treated by the Pfannenstill method, the author had the ulcerated areas upon the forearm and wrist dressed in similar fashion, with great benefit. The case illustrated the value of the method, particularly in the treatment of ulcerative lupus of the cavities. The patient had borne the iodide very well, and to make sure that the condition was not complicated by congenital syphilis a Wassermann reaction was performed, with negative result. The patient has gained 7 pounds while in the hospital, and her general health has improved greatly.—Proceedings of the Royal Society of Medicine.

The Diagnostic Value of Analysis of the Cerebro-Spinal Fluid.

M. W. Mastrezt draws attention (*Gazette des Hopitaux*, May 7, 1912) to the neglect of careful analysis of the cerebro-spinal fluid in pyrexial diseases, especially when cerebral symptoms are present. He thinks that a micro-biologism examination is not so helpful as a chemical one from the point of either diagnosis or prognosis; and he points out that in rachidian anaesthesia it has become a necessity. From numerous analyses of the fluid he gives the following as the composition of the normal secretion: Specific gravity, 1007.50; albumen, 0.18 per litre; sugar, 0.53 per litre; chlorides (NaCl), 7.32 per litre; dry extract, 10.93 per litre; carbonate (Na_2CO_3) 1.25 per litre; alkaline ash, 1.43 per litre. In general affections, continued fevers, pneumonia, bronchitis, and so forth, the fall in the proportionate amount of chlorides was found in collocation with a meningeal hyperaemia and a participation of the cerebral centres with the congestion of their membranes; conditions very difficult to diagnose by clinical examination. And he instances the case of a young child in whom an analysis of the spinal fluid cleared up a very doubtful diagnosis. The value in both uraemia and diabetes is helpful in prognosis and diagnosis; in the former a decided increase of chlorides is almost pathognomonic, and in the latter the presence of sugar and acetone settles the question of diagnosis. He concludes by affirming that of all resources for diagnosis analysis of the spinal fluid is the most helpful, the most precise, the most sure, and exhaustive.—*The Dublin Journal of Medical Science*.

Deafness Caused by Excessive Tea Drinking.

Sharp reports the case of a woman, aged forty, who complained of increasing deafness for about eighteen months. On examination there was found difficulty in locating sound, but no tinnitus; watch and whispered voice were heard about 6 inches from both ears; nose and throat were healthy; tympanic membranes were normal. Tuning fork tests were typical of nerve deafness. Family history was negative. No syphilis. Patient was subject to worry. She found that strong tea cheered her up, and admitted taking it as often as eight or ten times a day. The tea drinking was stopped, and in four weeks the hearing improved to 18 inches for watch and whispered voice. Improvement continued until the hearing was nearly normal. In spite of warning the patient again took to tea drinking and deafness resulted. On again

giving up the habit normal hearing returned.—Proceedings of the Royal Society of Medicine.

"Throw Physic to the Dogs."

When Macbeth told his doctor to throw physic to the dogs he had some reason for saying so, as the man of art had just confessed that he could do nothing for his patient. When General Sheridan said he would follow the advice but for the fact that there were some valuable dogs about, he at least produced a new variant on the hoary-headed gibes at the expense of the profession. But how often do we hear of people who, apparently out of mere boastfulness, will not take the medicine ordered for them! If, as is often the case, they have not paid the doctor and have only a pious intention of doing so somewhere about the Greek Kalends, the jest may have some point, though it seems silly to seek advice which they do not mean to follow. Moliere told Louis XIV that he gossiped with his physician, and that he did not take his medicine, and got well without it. But he may have taken his advice all the same. Moutaigne, another of the great jesters at the art of healing, was a hypochondriac, and visited all manner of baths and so forth in search of health. Moliere, at any rate, was a grateful patient, for he obtained a canon's stall for the son of his physician, Mauvillain, who is said to have given him technical help in his attacks on the faculty. There are many people, however, who will pay fees, get the prescriptions made up, and then scoff at the oracle and his counsel. This class is well represented by Turgueniev, who in one of his sketches of Russian life has drawn a picture of a compatriot whom he by accident found dying in a hotel at Dresden. He was consumptive, and the novelist took charge of him. The patient was very cheerful, and his chief amusement was playing tricks on his doctor, to whom he used to relate all sorts of complications of his disease, the offspring of his own fancy, which the worthy German always pretended to have foreseen and announced. After the doctor had left the patient would mimic him, and throw his medicines out of the window. More than once Turgueniev suggested that it would be well to call in a doctor of high professional standing while there was still time, and told the patient that he ought not to play the fool with his disease. But the sick man only replied with jokes at doctors in general, and his own in particular. He became a little serious towards the end, saying that, after all, it was hard to die, but, recovering himself, he said, "Listen, the doctor will come tomorrow, and he will find

me gone to the other world. I can imagine his look!" And the dying man tried to imitate the stupefied expression on his physician's face. A few minutes later he died. We have only quoted this narrative, which is doubtless a product of the Russian novelist's fancy, because it illustrates to an exaggerated extent a type of patient with which every practitioner is well acquainted. The sense of humor varies in man, not only in degree but in kind; did not George Eliot say that a difference of taste in jokes placed a severe strain on friendship? We would not grudge a dying man any distraction he might find during the last few and evil days of his earthly pilgrimage. But surely if the doctor is paid—a large "if," indeed—he has the best of the joke. If a patient chooses to dispense with the last rites of medicine, why should he go through the costly farce of having a minister of healing to look on at his exit from the world? This is a form of scoffing at medicine which doctors cannot reasonably object to; if a patient throws physic to the dogs that is his affair. But to pay for advice which is not taken is a jest which may be a supersubtle enjoyment to some eccentric minds, but to most people it is as foolish as asking a solicitor to draw up a deed for the mere pleasure of destroying it. There are, however, in the journals devoted to the propagation of health fads many indications that this kind of joke has a special effect in "disoppilating the spleen" as the older physicians used to say. It is at any rate harmless, for it hurts no one but themselves.—The British Medical Journal.

Local Treatment of Vagina.

Nässauer is of opinion that local treatment applied in the vagina should be considerably modified. He does not like the irrigator and disinfecting irrigation. In its place he advocates the employment of a powder distributor, which he calls the "siccator," and the substance which he blows into the vagina is bolus alba. He claims that since he first called attention to the advantages of this method of treatment, a large number of medical men have taken the treatment up, and in no case have there been any adverse criticisms. In treating a vaginal discharge he insists, first of all, that the cause should be sought in every case. The lungs, heart, and blood should always be examined. The action of the bowels must be investigated, since constipation is a frequent cause. Chlorosis (anemia), early tuberculosis, etc., are also mentioned. Naturally, the cause must be treated first of all.

The procedure which he follows is first a bimanual examination. Next the speculum is passed and the vagina is swabbed out

well. Then a spoonful of powder is applied to form a thick cover all over. In using bolus he states that it is difficult to use enough. On the following day he examines again, and usually finds that the discharge has ceased externally, having been soaked up into the powder to form a wax-like yellow mass, which can readily be removed with dry swabs. If the vaginitis is acute the mucous membrane tends to bleed and is inflamed. He thereupon orders the patient to blow in bolus with the siccator three or four times a day. Douching is only permitted when after several applications of the powder the discharge reappears. This takes place after about two or three days. The fluid to be used is a solution of soda or camomile. Immediately after the irrigation the powder is again applied. It is desirable to avoid cleaning out the vagina in any other way, and especially to swab out the vagina. The powder is kept up till the discharge is gone. He says that the bolus not only acts by drying, but, inasmuch as it fills out the cervical canal, it acts as a drain. The cervix no longer lies in a bath of pus, and therefore the source of reinfection is removed. He has not tried it in children, but others report favorably on this. He has experimented with a number of other powders but so far finds bolus the best of all. He gives detailed accounts of the effects obtained in the various conditions associated with vaginal discharge. He obtains good results in practically every one of the known forms of vaginitis. The advantages are said to be manifold over the moist methods, not only in respect to cure, but also subjectively for the patient. He points out that the siccator blows up the vagina, and thus enables the powder to be distributed all over the mucous membrane, even in niches which are never reached by fluid.—British Medical Journal.

Ovaradentriferrin in Gynecology.

Ovaradentriferrin is a mixture of concentrated ovarian extract with triferrin in the proportion of 3:1. It is indicated in the disturbances of the menopause and after removal of the ovaries but also does good service in chlorosis, menstrual disturbances, hypoplasia of the genitals and other female conditions supposed to be intimately related to the function of the ovaries. According to Walther, the symptoms relieved most readily are not flushes, meteorism, eructations and psychical disturbances, vertigo and headache. Excellent results were obtained by the author in delayed menses and amenorrhea provided the ovaries were not completely atrophic. According to the modern conception, many cases of chlorosis in young girls depend upon

disturbances in the internal secretion of the ovaries, hence the combination of ovarian substance with iron seems to be very rational. The drug is supplied in tablets which are taken two to three a day for periods of two to three weeks.—Muench. med. Woch.

Emetine in Amebic Dysentery.

In the treatment of amebic dysentery, Rogers has employed the soluble hydrochloride of emetine with most phenomenal results. He gives the case records of two of his patients who were practically moribund when the treatment was instituted and who recovered as a result. He injects one-sixth grain at the first dose, and rapidly increases this to one-third grain, twice daily. There is no nausea nor emesis. He was led to try this drug through some experiments in which he found that this alkaloid in one to 10,000 in saline solution was rapidly fatal to the ameba in a freshly passed stool, and that in a few minutes the amebas were rendered inactive and apparently killed by as weak a solution as one to 100,000 of emetine. A great advantage in the hypodermic use of the salt of the alkaloid is the ability to introduce an extremely large amount into the body without the production of vomiting.—The British Medical Journal.

Camphor Phenol in Rheumatism.

Chlumsky reports that he has had excellent results in the treatment of rheumatic affections by the application externally of a mixture of 2 parts ground camphor and 1 part phenol, adding 5 per cent. alcohol to the mixture. This compound forms an oily fluid, hardly soluble in water and free from caustic action. The author states that he pours the preparation directly into old wounds without pain to the patient. It has also proved highly beneficial in many cases of erysipelas; it seems to be especially a poison for streptococci. When used in this indication the mixture sometimes causes a blue discoloration of the skin, which he ascribes to the liberation of the phenol. He cites in particular one case of severe articular rheumatism which did not yield to treatment by salicylates or other measures, and in which morphine was necessary to deaden the pain. He applied the camphor-phenol mixture to the joints and in 24 hours the pain had decreased appreciably, as also the swelling, and within three weeks the patient was cured and has since suffered no recurrence. In mild external processes he applies the mixture lightly with a brush and covers it with cotton. In erysipelas and severely infected wounds he dips cotton in the mixture and applies it directly to the infected skin or wound with a layer of cotton above.—Zentralblatt für innere Med.

Treatment of Syphilitic Aortitis and Aortic Aneurysm.

—Vaquez and Laubry (*Bulletins et mémoires de la Société médicale des hôpitaux de Paris*) report results obtained by injections of salvarsan and of mercury compounds in twenty-eight cases of syphilitic aortitis, some with or without simple dilatation of the vessel, others with actual aneurysm. Of fifteen patients treated with salvarsan which was administered in series of three injections of 0.2 gramme at eight day intervals, four were remarkably benefited, pain and dyspnea disappearing, the diameter of the dilated aorta diminishing, and the patients being enabled to resume their former occupations. Five others, including four with aneurysms, obtained symptomatic relief lasting at least two months, while the remaining six were not benefited. Thirteen cases, comprising five of aneurysm and eight of simple aortitis, were treated with intravenous or intramuscular injections of cyanide or biniodide of mercury, given in series of twelve injections on successive or alternate days. All these patients, whose condition was equally serious as in those treated with salvarsan, showed prompt improvement in the symptoms, and in two cases diminished size of the aorta was observed orthodiagraphically. Three of the cases uninfluenced by salvarsan were subsequently improved by mercurial injections. Two cases in which the benefit due to mercury had finally disappeared, and one in which neither salvarsan nor mercury had proved efficient, were improved by potassium iodide taken internally in large doses, or by injections of other iodine preparations. Concluding from these results, the authors advise that in specific aortitis or aneurysm intravenous injections of 0.01 gramme of mercury cyanide be preferably given. If they cannot be employed or are badly borne, intramuscular injections of the same salt or of 0.02 gramme of the biniodide should be administered. Iodine preparations should also be given. If results are poor or evanescent, series of injections of salvarsan are entirely permissible, provided care be taken to exclude patients showing symptoms of cardiac weakness, and to favor especially those who have not exhibited symptoms of pulmonary edema at the time of their anginal or other painful attacks.

Bed Isolation of Cases of Infectious Diseases.—Rundle, in *The British Journal of Children's Diseases*, relates his experience of treating the following diseases in one ward at the Fazakerley Hospital in Liverpool:

(1) Cases of puerperal fever, erysipelas, rubella, and varicella.

(2) Cases found not to be suffering from infectious disease.

(3) Doubtful scarlet fever or diphtheria cases.

(4) Cases requiring operative treatment in which the treatment may be prolonged.

(5) Cases of diphtheria or measles when the wards receiving these patients are pressed by a sudden rise in the incidence of the disease.

(6) Cases of epidemic diarrhœa.

The number of cases admitted to the ward in the course of two years was 741, and of these only two developed an infectious disease while under treatment. In one case of rubella scarlet fever was acquired from a four months' case complicated by otorrhœa, while the other admitted with mild faucial diphtheria was secondarily infected with the same disease. Tables are given of the number of different diseases, varying from six to thirteen, treated concurrently at various periods.

The question of aerial transmission of infectious disease was discussed, especially in relation to varicella, and it was shown that forty-one cases of this disease had been treated in the pavilion, but no cases of cross-infection occurred. But in the ordinary wards varicella had been introduced on twenty-one occasions during the same period. Precisely the same opportunities existed for aerial infection in both cases. In the experimental pavilion contact infection was prevented, but not in the ordinary wards. If varicella was an aerially conveyed disease it must presumably be so by transmission of small portions of the scabs, but in that case return cases would be common, whereas they are practically unknown. The idea that the staff might develop mild and unrecognized types of infectious diseases and so act as carriers was refuted; only one out of a staff of fifty-five developed an infectious disease.

The number of articles retained for individual patients was reduced as far as possible. Feeding and other utensils were taken from a common stock and sterilized after use. Hand-washing was regarded as of final importance, and to prevent this becoming perfunctory the basins were situated in the middle of the ward and not at the bedside.

The system presented many difficulties. It required a highly trained and intelligent staff. It was necessary that scarlet fever cases with infectious complications should stay for long periods in bed, but the system was justified from the fact that of 214 patients treated in the same ward with 527 infectious cases none contracted an epidemic disease.

Severe Icterus.—Moty (The British Medical Journal) points out that the pathogeny, etiology, and symptomatology of grave icterus is still clouded in obscurity. He refers to the case of a man of 26 years, which came under his observation. The patient was first treated for submaxillary adenitis—it had been the third attack of the kind—which terminated in suppuration. The patient attributed the condition to malarial fever, and his appearance rather bore this out. A little later he entered hospital suffering from icterus which had come on insidiously. There had been a period of loss of appetite, general lassitude, and a sensation of weight in the right flank. A violent attack of hepatalgia succeeded, and this was followed by vomiting of a brownish-green material, and the state of the urine usual in such cases. The next day delirium supervened, and violent convulsions followed by coma. The pulse was slow, strong and regular, and the author was much struck by the noisy cardiac impulse, which was heard at a considerable distance from the patient. Soon after another attack of convulsions occurred, followed by rhythmical movements of the head from left to right. The cardiac sounds were now no longer heard at a distance, and the patient died within forty-eight hours of the acute attack. The autopsy showed that the stomach was dilated, the mucosa softened and covered with ecchymotic points. The liver weighed 900 grams, and presented a marbled appearance. The gall-bladder contained thick black bile, and the canal of Wirsung was permeable. The kidneys were very congested, especially in the region of the pyramids. There was a quantity of fluid in the pericardium. He says the case establishes the fact that the slowing of the pulse coincides with the degree of cholemia. If the relationship is at fault in severe icterus it is because there is an element of infection superadded. He says that the perception of the cardiac sounds at a distance in grave icterus is a feature which has hitherto escaped notice.

The Relation Between Hemorrhage and Changes in the Uterine Mucosa.—Scheckele and Keller (Archiv. für Gynäkologie) have made an extended study based on 430 observed cases, of the relations between glandular hyperplasia of the mucous membrane of the uterus and uterine hemorrhages. The material studied was obtained by curettage and also from a certain number of cases of hysterectomy, and as a result of their investigations the authors come to the following conclusions, namely, that there exists a hyperplasia and a hypertrophy of the uterine glands which

have no relation whatever to the menstrual changes which take place in the mucous membrane and which must be regarded as a pathological condition. These changes in the glands are not brought about by inflammatory conditions, and for this reason "glandular endometritis" should in the future be avoided and in place of this, the condition should be referred to as a hyperplastic and hypertrophic endometrium. No etiological connection could be shown between these glandular changes and uterine hemorrhages. They may be present at the same time but are usually absent even in the presence of marked hemorrhage or may be well developed without there being any bleeding present at such a time. On the other hand, in the presence of hemorrhage, as well as in the various phases of the menstrual period, a dilatation of the vessels and an edematous condition of the mucous membrane is present, together with the changes in the interstitial connective tissue cells. The failure of curettage in cases of uterine hemorrhage likewise seems to point to the practical conclusion that there is no association between glandular hyperplasia or hypertrophy and chronic uterine hemorrhages.

Treatment of Trachoma by Diphtheria Antitoxin.—Pachopos (La Grece Medicale) says that in suppurative and granular conjunctivitis not associated with corneal ulceration, and in acute trachoma with watery discharge and eczema of the lids, the author recommends the administration of subconjunctival injections of diphtheria antitoxin. After turning back the lids the eye is first washed with boric and saline solutions, and one c.c. of fresh antitoxin injected in each lid, proceeding from within outward. The lids are then returned to the normal position, and with the eye closed a third c.c. is injected under the skin and muscle tissue of the upper lid. The injections are followed by pain, acute œdema resulting in closure of the eye, and an erysipelatoid eruption which overspreads the cheek and forehead. In 36 hours the inflammatory reaction disappears, lachrymation ceases, and the granules become attenuated or disappear. Three or four such treatments are given. Of 50 patients who received such treatment, 30 were practically cured, and the others notably improved; in the latter the additional use of copper sulphate and mercuric chloride led to complete recovery.

Uterine Hemorrhage and the Curette.—Whitehouse, in The London Medical Lancet, makes a few comments on the treatment of this condition.

First, as to the rational treatment of idiopathic uterine hemorrhage, it will be evi-

dent that neither ergot nor curetting will effectually control the condition. It can indeed be truly said with regard to uterine hemorrhage that the keystone of the therapeutic arch lies in a correct diagnosis. Uterine bleeding must be considered as a symptom only, and no stone must be left unturned to limit the examination to the pelvic organs. The abdomen must be examined for evidence of hepatic enlargement, the blood-pressure must be accurately measured by a sphygmomanometer, and the condition of the vessel walls ascertained. Evidence of syphilis or other constitutional disease should be looked for, and if possible the calcium index estimated. The condition of the heart, lungs, and thyroid gland must be noted, and if circumstances permit, a bacteriological examination of the uterine blood should be conducted. If the uterus is sterile, and no other cause is found to account for the bleeding, then one may confidently recommend curetting as a therapeutic measure. Individual treatment will, of course, depend upon the condition diagnosed. Thus where the bleeding is due to a high arterial blood-pressure the tension must be reduced by purgation, nitroglycerin, and dieting. Purgation will also have its place in depletion of the portal circulation where hemorrhage is due to hepatic cirrhosis. If the calcium index is low menorrhagia will probably be benefited by the administration of this agent, preferably in the form of the lactate.

In the case of bacterial infections Whitehouse has obtained good results by intra-uterine applications such as peroxide of hydrogen, Churchill's iodine, or protargol. Treatment in these cases must be thorough and prolonged. The curette under such circumstances should, according to Whitehouse, be absolutely tabooed.

Finally, where hemorrhage is due to rupture of degenerated vessels in the uterine wall, hysterectomy appears to be the best and safest procedure. Howard Kelly devised a partial hysterectomy for similar cases, and it was introduced into England by Victor Bonney under the name of "utriculoplasty." So far the operation, in London at least, has received but little support, the general opinion being that if hysterectomy is required to relieve severe bleeding, it is preferable to perform the complete operation.

The X-Ray Treatment of Graves' Disease.—Hooton (British Medical Journal) says that summing up the whole matter one may say that the noteworthy features are the lessening, often rapid, of the nervousness, the dyspnea, the tachycardia, and the tremor; the patient's weight increases, and

there is a return, in a greater or less degree, to a normal enjoyment of life.

One defect undoubtedly did, and to a smaller extent still does exist—namely, the soreness of the skin of the neck, a true radiodermatitis, present as a rule only for a few weeks during the earlier part of the treatment, but unfortunately giving place to a permanent brown stain and patches of dilated capillaries, which to those who wish to wear low necked dresses is necessarily a great disadvantage. These difficulties, however, are being overcome by filtering out the softer rays which are responsible for the mischief to the skin.

Creation of a Vagina in Congenital

Absence.—Juvara (Rev. de Gyn. et Chir. abd.) says that the best method of making an artificial vagina when one is congenitally absent is the use of a segment of the small intestine separated from the gut with a segment of the mesentery and transferred to a position created by separation of the layers of the layers of the region between bladder and rectum. The creation of a vagina in this location by the use of skin and mucosa from vulva and neighboring regions is generally a failure, because of the contraction of the tissues which occurs after operation, making the new vagina useless. The segregated portion of intestine forms a vagina which serves all necessary sexual purposes perfectly, and satisfies both husband and wife, while the patient loses none of the advantages of the normal genital organ or of its sensibility. Up to the present time seven cases operated on by this method have been published, to which the author adds an eighth. All these patients have been satisfied with their results. Of course this operation is more delicate and serious than the others heretofore proposed, but its advantages outweigh its dangers, and no bad results have thus far been obtained. Baldwin and Mori are the two surgeons who have proposed this method. It obviates the necessity of a second operation, even a small one, which is necessary by the other methods. He first made the separation of the rectovaginal space into which the intestine was to be inserted. The author then opened the abdomen, selected a coil of the small intestine, which, with its mesentery, he isolated and cut from the rest of the intestine, closing both ends with sutures. The ends of the remaining gut were reunited with a button. The separated portion was twisted into its place, the abdomen closed, and the new vagina sutured into the space between bladder and rectum which had been prepared for it, and sutured to the skin externally. The result was excellent.

Pituitrin in Obstetrics.—Fischer (Zentralblatt für Gynäkologie) reports his observations on the use of pituitrin in a series of 50 cases, as a result of which he presents the following conclusions: Pituitrin may be regarded as a fairly constant oxytocic in primary and secondary uterine inertia, the efficiency of which seems to depend upon the stage to which labor has advanced at the time of its administration. He has not found it effective as a means of inducing labor prematurely or at the end of term, but it has given good service in active abortion and also in premature labor. Furthermore it is a valuable means of hastening the course of a normal labor in cases where the interests of the mother or the child demand the same. These include narrow pelvis, rise of temperature during labor, danger of infection after intrauterine manipulations and certain cases of placenta previa. The drug seems to have a very satisfactory prophylactic action after labor where severe postpartum hemorrhage is expected, and in these cases, if the injection is given before the completion of labor the irritability of the uterine muscle is increased to such an extent, that if hemorrhage occurs it is more readily controlled by the usual procedures. No disagreeable sequelæ after the use of the drug have been noted in either the mother or the child, and the writer considers in agreement with many others that pituitrin constitutes a valuable addition to the obstetrical formulary.

Oxyuris Appendicitis.—Still (British Medical Journal) called attention to the fact that the oxyuris was not alone an inhabitant of the entire colon, but also invaded the lower portion of the ileum, and at times the appendix, giving rise to a mild inflammation in this region with symptoms suggesting appendicitis.

During the past year a number of cases have been reported in which the appendix, after appendicectomy, was found to be the seat of oxyuris colonies. It is well, therefore, that the stools of all children suffering with pain, tenderness and rigidity in the right iliac region, should be carefully examined for parasites, especially the oxyuris.

In the treatment of "pin-worms" one should not be satisfied that a cure has been obtained by depositing a few ounces of medicated fluid in the rectum. Before treatment is begun a saline cathartic should be given to dislodge the worms. A colon irrigation with normal saline or borax solution should then be given to wash out the mucus from the entire lower bowel, and this should in turn be followed by the injection of a large quantity of infusion of quassia, infusion of garlic, or a mild bi-

chloride solution, to be retained as long as possible. A course of intestinal, antiseptic treatment should then be given. He prefers santonin for this purpose. The bitter tonics, quassia and gentian, also aid in dislodging the oxyuris from its habitat.

Benedict's Test for Sugar.—Myers (Muench. med. Wochenschr.) says that this test is finding widespread use in this country, but its excellence warrants our calling attention to it here. The qualitative solution is prepared as follows: 173 gr. sodium or potassium citrate and 200 gr. crystallized (or 100 gr. anhydrous) sodium carbonate are dissolved in 800 c.cm. boiling water. This is cooled and filtered, whereupon 17.3 gr. copper sulphate, dissolved in 100 c.cm. water, are added and the whole diluted to make one litre. The solution is used like Fehling's or Fehlings' fluid, but is at once more sensitive to sugar and less so to other reducing substances. Its increased sensitiveness is due to the fact that the sodium hydrate of the other methods destroys part of the sugar, whereas the milder alkalis of Benedict's solution do not. The solution is also unusually stable. A slight alteration of the formula results in a quantitative solution by means of which the amount of sugar in the urine can be conveniently and accurately estimated.

Magnesium Sulphate Injections in Rheumatism.—Jackson, in The London Practitioner, says that the injection intramuscularly of 10 to 15 grains (0.6 to 1.0 gm.) of magnesium sulphate is advised. A saturated solution of the salt may also be applied to inflamed joints. The solution is applied cold, covered with oiled paper, and allowed to remain in situ, the gauze being kept moist by pouring the solution alongside the affected part. In a few cases the injections produced active purgation, but in the majority no such effect on the intestinal tract was evident. If required, magnesium sulphate by the mouth may be administered to correct obstinate constipation. At first the author employed this treatment only in cases where the salicylates failed or nauseated the patient, but it proved so successful that he now uses it in all cases. No bad effects have been noted after its use. In two cases of amygdalitis of the follicular type the author has successfully employed intramuscular injections of magnesium sulphate together with the external application to the throat of a saturated solution of the drug, after salicylates had failed to effect a cure. The author is as yet unable to give any explanation of the mode of action of this drug.

Death of the Child Due to Rupture of Umbilical Vessels During Labor.—

Williamson (Jour. Obst. and Gyn. Brit. Emp.) says that the essential anatomical feature of a velamentous placenta is the termination of the cord at some distance from the placental margin, the vessels diverging from one another and running over the chorion leave for a greater or less distance. The writer records a case in which the umbilical artery which ruptured was not a vasa previa, and the branch of the umbilical vein which corresponds to the ruptured artery was thrombosed throughout the greater part of its length. In cases of this type the diagnosis can be made early in labor if pulsating vessels are felt running across the presenting pole of the bag of membranes. After bleeding has commenced the condition is usually mistaken for placenta previa or accidental hemorrhage; in one or two instances, however, suspicion has been aroused because, in spite of severe bleeding, the mother showed none of the signs or symptoms of hemorrhage. Williamson suggests the possibility of confirming the diagnosis in such cases by microscopic examination of a film of blood, the demonstration of nucleated red corpuscles would prove that the child was bleeding. When diagnosed early in labor, the best chance of saving the life of the child lies in Cæsarean section or in vaginal section, but when the vessel has once ruptured the life of the child is so precarious that it does not seem justifiable to subject the mother to the risk of operation.

Unilateral Exophthalmos.—Comie, in The Edinburgh Medical Journal, says that unilateral exophthalmos in Basedow's disease is not by any means unknown, though it has been described in a comparatively small number of cases. Wornus and Hainant detail a case of exophthalmic goitre, with two illustrations, in which the left eye only was affected. They quote the inaugural thesis at Lyons in 1910 of Legras de Vaubercy, who collected most of the cases that had been recorded, numbering 43; and they give references to 23 other cases in which the left eye was affected, and 20 cases in which the right eye was protruded, thus making in all 91 recorded cases. Taking the latter 43 cases, they found that in 17 the goitre and the ocular protrusion were on the same side, in 6 cases there was crossing of the two symptoms, while in 13 cases the thyroid enlargement was little, if at all, to be made out. The writers discuss the various theories that have been advanced to account for exophthalmos. They reject for various reasons the vascular theory, according to which the eye-ball is supposed

to be pushed forwards by dilatation of the vessels behind it. For example, if it were due to vascular dilatation, there would certainly be throbbing between systole and diastole; it would also be difficult to explain why the condition should be relieved by section of the sympathetic, and how, in these unilateral cases, one eye only could be affected. The writers therefore incline to the muscular theory, by which the exophthalmos is supposed to be due to irritation of the sympathetic and consequent contraction of the orbital muscle fibres associated with the capsule of Tenon.

Adherent Pericardium.—Pitt, in The London Practitioner, reports several cases and discusses the condition at considerable length. The Dr. considers prophylactic treatment to be the most important, and says that much more might be done to prevent acute rheumatism in children from developing by keeping the nasopharynx in a healthy condition and insisting that they should be instructed at school in nasal breathing. The majority of cases owe their origin to mouth breathing, and are very often associated with adenoids; but too often, when the adenoids have been removed, no instructions have been given about the training necessary to prevent their recurrence. Acute pericarditis is the most grave cardiac lesion of childhood. All patients with rheumatism should be put to bed as soon as possible and, when acute pericarditis has developed, very prolonged rest in bed is necessary, when possible for at least six months, because if the heart work is reduced to a minimum the heart is less likely to dilate, the adhesions will be less extensive, more supple, and more likely to be absorbed than when the child is allowed to run about and take exercise. It is the toughening and intensifying of the adhesions, changes which take place very often from three to six months after the attack of acute pericarditis, which lead ultimately to the grave interference with the efficiency of the heart. It is a question to what extent the density of the adhesions can be controlled by drugs. Many give potassium iodide and mercury to aid the absorption of the fibrin in the pericardial sac and to allow as little connective tissue to form as possible. In the later stages fibrolysin has been used, but it is difficult to say whether it is of any great value. The subject of operative intervention by Brauer's operation of cardiolysis is discussed.

Phimosis and Hydrocele in Infants.—

Peiser (Berlin. klin. Woch.) regards phimosis as a more or less physiologic condi-

tion in young infants, which will correct itself later on. The symptoms usually attributed to phimosis he believes are due to pelvic congestion from constipation. The urinary disturbances are neuromuscular in origin, reflex from the rectum. As for hydrocele, Peiser thinks operations unnecessary, as most of them will subside of themselves. The figures quoted, however, do not quite bear him out in this, as only 34 of his 73 cases were normal at the end of two years. These views on phimosis and hydrocele will not, probably, find ready acceptance, but they are surely of great interest, even if one does not agree with them.

Treatment of Fractures of the Skull.

—Schaack (*Archiv für klinische Chirurgie*) reports 530 fractures of the skull covering the years 1900 to 1910. Of these 364 were of the convexity and 166 of the base. The number of skull fractures constituted 9.7 per cent. of all fractures treated during the same period. This percentage is higher than in most other series, a fact accounted for by the low state of civilization amongst the population from which this clinic is recruited and the consequently large number of persons who are assaulted by blows upon the head; also by the wide-spread drink habit—144 such fractures were suffered by men in a state of drunkenness. Of the 166 fractures at the base the mortality was 102. The symptoms were in 41 complete unconsciousness; in 125 disturbance of consciousness; in 101 bleeding from the ear; in 75 bleeding from the nose; in 14 bleeding from the mouth; loss of cerebrospinal fluid occurred in 11 cases; the facial nerve was paralyzed in 45 cases; vomiting in 28; paralysis in 10; spasms in 12; speech disturbance and aphasia in 12. The treatment in fracture of the base consisted of complete rest in bed, ice to the head, and, when necessary, stimulants or narcotics. In case of bleeding from the ear or nose tamponade and irrigation were avoided, as both are conducive to infection in the deeper tissues with resulting meningitis. Operation was done in only one case. The patient died five days later. Of the 64 cases cured, in 15 persisted paresis, in eight running ear, and in three disturbances of vision. Of the 102 fatal cases 56 were moribund on admission; 28 died of suppurative meningitis, and 18 on account of the severity of the injury. It is thus observed that in all who survive the first one or two days meningitis is the commonest cause of death. Treatment extended over a period of several weeks; only a few were discharged under two weeks; most cases were treated for

three to four weeks, and some as high as a month.

Of the 364 cases of fracture of the convexity, 85 died. The symptoms observed were in 95 cases unconsciousness, in 35 vomiting, in 49 paralysis or paresis, in 14 convulsions, and in 13 disturbances of speech or aphasia. The exact diagnosis of the character and extent of the fracture was made in most cases only after enlarging the scalp wound by operation. There were treated by operation 206 cases, of which 52 died. The dura was injured in 93 cases, of which 45 died. Injury of the dura is to be considered as a very dangerous complication, which renders the prognosis much more grave. If the brain substance is injured also, the prognosis is still worse; out of 53 such cases 50 were fatal, usually as a result of suppurative meningitis. The operative treatment consisted chiefly in enlarging the wound, caring for the injured bone in the usual way by removing dirt and splinters of bone, smoothing sharp edges, and in a few cases forming an osteoplastic flap.

Perforating Wounds of the Larynx.

Boljarski (*Beiträge zur klinischen Chirurgie*) says that from 1900 to 1910, 220 cases of wounds of the neck were observed by the writer, and of these 25 were penetrating wounds of the larynx. In this series 21 were inflicted with suicidal intent. In 9 cases the cricoid cartilage was penetrated, in 7 the thyroid, in 7 the thyrohyoid ligament, and in 2 the conical ligament. The size of the laryngeal wound bore no definite relation to the skin wound; at times the skin wound was very large, while the wound in the larynx was small, and at other times the opposite was the case. The wound in the larynx was at times isolated, while at others it was associated with injuries to the vessels and nerves. As a rule there is not much separation of the lips of the wounds unless the larynx is completely severed.

The chief dangers of wounds of the larynx are asphyxia and hemorrhage. Later complications are tracheobronchitis, bronchitis, pneumonia, pleurisy, abscess and edema of the larynx.

The first duty of the surgeon in these cases is to control the hemorrhage and to counteract the tendency to asphyxia. The bleeding vessels are to be ligated, the blood aspirated from the respiratory tract, and loose pieces of cartilage removed. The best method of dealing with the laryngeal wound is to suture it and the overlying tissues in layers. This affords the best means of securing healing and complete restoration of function. In nine out of eleven cases thus treated healing occurred by first intention.

Prior to suture a prophylactic vertical tracheotomy must be performed and a cannula introduced. Drainage is introduced at the angles of the wound. The dressing is applied in such a way as to hold the head firmly in a flexed position. General anesthesia is very seldom required. Operation is done either under local anesthesia or without any anesthesia, as the state of the patient's consciousness is often very low.

The Artificial Production of Pneumothorax in Phthisis by Injection of Nitrogen.—Chitty (Bristol Medico-Chirurgical Journal) mentions what are suitable and what unsuitable cases. In cases in which there is active and advanced disease on both sides it would obviously be useless and indeed harmful to throw all the work upon one lung. Attempts have been made, it is true, to compress the two lungs alternately, but, at any rate for the present, we may regard advanced bilateral disease as a chief contraindication. Extensive disease in other organs, especially intestinal tuberculosis, would also be a bar to operation. Of the remaining cases may be considered as specially suitable:

1. Those in whom the disease is advanced on one side, whilst the opposing lung is unaffected, slightly affected, or quiescent.

2. Those in whom the temperature remains high in spite of the usual methods of treatment, and who show signs of autoinoculation whenever they take any exercise. Chitty here instances one of his own cases, whose evening temperature for at least a year has been from 99° to 100° , in spite of his having spent a long time at a sanatorium, and of the fact that at home he had been living in a shelter. His temperature came down to normal within forty-eight hours, and has remained at that level ever since. Numerous similar instances have been recorded.

3. Cases which are going downhill in spite of the usual methods of treatment.

4. Early unilateral cases for whom sanatorium treatment is not available. Especially does this apply to the breadwinner of the family.

5. Cases of severe recurrent hemoptysis. One is often in doubt as to which side is giving rise to the bleeding, but in these cases it would be quite justifiable to compress the worse lung, and, if this had no effect, then to aspirate the gas and repeat the operation on the other side.

6. Although most of the recorded cases have been patients suffering from chronic tuberculosis; yet this has not been by any means invariably so, and some cases of acute phthisis have been successfully dealt with.

Laryngeal tuberculosis does not appear to be a bar to the operation. In fact, several recoveries from this form of disease have been recorded. This is easy to understand, as the cessation of cough and of the constant passage of tuberculous sputum over the larynx must be beneficial.

The question naturally arises, "What is the duration of the treatment?" No very definite answer can yet be given. There is little doubt that in advanced cases it must be prolonged for eighteen months to two years; but in very early cases cure has been reported when the gas has been allowed to absorb completely after a few months only. If the treatment has not been sufficiently prolonged recrudescence has been the rule. Under these circumstances it has been found impossible to reduce the pneumothorax owing to the formation of dense adhesions between the two pleural layers. Therefore when it has been decided to allow the lung to re-expand a careful watch should be kept on the patient. A rise of temperature or any increase in the amount of expectoration would suggest the advisability of keeping the lung at rest for a few months longer. It is wonderful how readily the healthy portions of the lung will expand and fill the thoracic cavity, even after the treatment has lasted from two to three years.

In discussing the results of treatment we must bear in mind that all, or almost all, the reported cases have been of one type, viz., patients suffering from very advanced disease, in whom other methods had proved incapable of arresting the morbid process, and in whom the mortality would most likely have been at least 90 per cent. Many cases have been too recently published for us to be able to judge what their ultimate fate may be, but undoubtedly the initial results have been full of promise. Certainly well over one hundred cases have, however, been recorded in which the treatment was commenced many years ago, and in these there would seem to have been a permanent arrest of the disease in at least 60 per cent. In many of the recent cases immense improvement has already ensued, and patients who a few months back seemed almost moribund now appear to be on the high road to recovery. Where deaths have been recorded during the course of the treatment they have been due, as a rule, to disease in the other lung, to tuberculous disease in some other part of the body, or to some intercurrent malady. In the few cases in which post-mortem examinations have been made, healing by fibrosis has generally been recorded, though this has not always been evident.

Nasal Treatment of Asthma.—Bonnier (Archives generales de medecine) reports seventy-five cases of bronchial asthma in which excellent results were obtained by light cauterization of the nasal mucous membrane. The procedure he advocates consists in first ascertaining, by contact of the cauterizing point, with the current turned off, the location of a small sensitive area of the mucosa which, when lightly touched, causes the patient to draw the eyelids together, or a sudden flow of tears. The situation of this area varies in different individuals, and it is to be sought in the anterior portion of the nasal cavities, on its outer wall or on the upper part of the septum, in front of the turbinates, sometimes just above the nasal ala, and often in front of the anterior extremity of the middle turbinate. As soon as this sensitive area is found, the current is turned on and the point touched with the cauterizing point as lightly as possible. The cauterizing point used should be the smallest available, and the cauterization done so lightly as to render previous application of cocaine unnecessary.

The immediate result of the cauterization is generally a sudden fit of sneezing or coughing, followed, often within a few hours, by complete and permanent relief from asthmatic attacks, even in the most severe and long standing cases. Occasionally, if the sensitive area is not exactly ascertained, or the respiratory centres have been too harshly impressed, an asthmatic paroxysm may be induced on the evening of the same day. But this is merely temporary, and where the method has not proved immediately successful another sitting should be given two days later.

The object of the treatment is so to influence reflexly the centres in the medulla having to do with respiration and other functions pertaining to the respiratory tract—the “pneumostatic” centres, the author designates them—as to wean these centres from their “enervated” condition and thus put an end to any functional irregularities, including asthmatic paroxysms, secretory phenomena, etc., for which they have been responsible. Seventy-five out of 100 cases treated were either cured or greatly improved; of the remaining twenty-five, some may also have been benefited, as among them were a number of patients who passed out of the author's observation. In many cases symptoms coexistent with the asthma, such as those of hay fever, gastrointestinal disorders, migraine, menstrual disturbances, vertigo, neurasthenia, etc., also disappeared as a result of the treatment.

Cure of Hydrocele by Lymphangioplasty.—Chatterji, in The Indian Medical Gazette, calls attention to the following operation in the cure of hydrocele;

The patient is prepared in the ordinary way. The part is shaved and cleaned on the previous day; when dry, pure tr. iodi is painted on and covered when dry with sterile gauze and bandage. On the operation table another application of tr. iodi is made. A medium-sized trocar and cannula is used, the hydrocele being tapped anteriorly a little lower than the middle of the swelling. A strong flexible probe or needle is threaded with 12 or 24 inches of three- or four-fold No. 10 or 12 tubular silk. This is introduced into the sac through the cannula, made to pierce the tunica vaginales and infundibuliform fascia, cremasteric fascia (int. obl.), intercolumnar fascia and dartos, and made to insinuate between the dartos and the skin of the scrotum and led upward toward the inguinal region. Half-way to Poupart's ligament the needle is brought out through the skin and reintroduced and led to the inguinal region, where it is made to emerge. The silk is then pulled through by the needle, if necessary with the help of a pair of forceps, and the end hanging out of the cannula is introduced for a fair length into the sac, the scrotum being so manipulated that the four ends of silk spread out inside the sac. The inguinal end of the silk is pulled up and cut short so that the cut end sinks deep under the skin. The punctures are sealed with collodion and a light dressing applied. The silk is bisterilized and gloved hands are used, or the hands after a complete course of cleansing are dried and painted with tincture of iodine.

Rest with support of scrotum on a bracket for three days is enjoined, and then the patient is allowed up with the scrotum supported.

The rationale of the operation is based on the principle of internal drainage of the serous cavity by the capillary action of the silk threads which act like artificial lymph-channels. He says that he has drawn his idea from Handley's Hunterian Lecture, 1910, on Surgery of the Lymphatic System, where he describes an operative treatment for ascites by “internal drainage by silk threads.” His operation of lymphangioplasty for lymphatic edema is on a similar principle. He states that Handley has published one case with successful results for ascites.

A Case of Syphilitic Reinfection with the Wassermann Reaction Still Positive.

—Gittings, in The British Medical Journal, mentions an extraordinary case from the

fact that it was apparently a syphilitic reaction when the Wassermann reaction incident to a previous infection was still positive. The patient contracted syphilis in 1909, and was treated for two years by inunction of mercurial cream. Thereafter his blood was examined by two laboratories, both reporting positive Wassermann, whereupon his doctor ordered his patient to have a further course of treatment. During this interval the patient directed the doctor's attention to an old scar which had recently come into prominence, exposure having occurred five weeks before. The patient was placed upon hydrarg. cum creta gr. iij ter die, but six weeks later the old scar broke down, exhibiting an appearance like primary chancre. The serum from this sore almost immediately revealed the *spirochæta pallida*.

Gastric Ulcer in Children and its Consequences.—Cackovic (Archiv. für klin. Chirurg.) reports 172 operative cases of gastric ulcer at Zagreb, of which 2.32 per cent. were under ten years of age, while 7.55 per cent. were under fifteen. He believes that even this estimate is too low, as the lesion must have been present in childhood in at least some of the others, the symptoms not being recognized until later. The diagnosis is not easy in children, as the pain is apt to be misinterpreted, and slight hemorrhages are quite likely to be overlooked. In 13 of the cases, while symptoms had been present since childhood, the operation was not performed until several years later. All the patients recovered except two.

Prostate Hypertrophy and Vesical Calculus. The Differential Diagnosis of these Conditions.—Janssen (Munch. Med. Woch.) says that the two above mentioned conditions are often mistaken for one another; this is due to the fact that the subjective symptoms in both conditions are often identical, and that the finer diagnostic methods such as cystoscopy and X-ray examinations are not always at the disposal of the physician. The author reports two cases which were treated for prostatic hypertrophy: the one patient had a perineal prostatectomy performed with no relief of his symptoms; X-ray examination later disclosed two large vesical calculi. The other patient was about to have a Bottini operation performed, when a searcher was introduced and stones detected. The stone searcher can only be of value when large stones are present; small stones or those lodging in diverticula or in deep prostatic pouches are often missed by this method. Cystoscopy at times cannot be carried out, a tortuous urethra with a large prostate may

prevent the introduction of the instrument, and then again when introduced the field may be obscured by blood, pus and mucus. Radiographic examination is of great value, and when negative makes the diagnosis of hypertrophied prostate most likely. Palpatory findings are of no value, for lateral lobe enlargement is encountered often in old people without giving rise to symptoms. We should first absolutely exclude stone before considering the case to be due to hypertrophy. Stone is often found associated with prostatic hypertrophy; most often the stones are secondary and form in the deep prostatic pouches or diverticula.

Climacteric Disturbances in Women.

—Jung (Deutsche Medizinische Wochenschrift) comments on the lack of causal treatment for these disturbances, but adds that much can be done by hygiene and dieting. The directions for a suitable diet must be explicit, as general directions are usually disregarded. As the disturbances are principally of vasomotor origin, the patients must avoid everything that tends to raise the blood pressure, especially alcohol and coffee. Lemonade, mineral water or milk should be the beverages, with possibly weak tea or cocoa. All highly seasoned, salted or peppery articles of food should be avoided. Lemon juice should be used in place of vinegar in salads. Meat should be eaten sparingly, eggs and vegetables being given the preference. No purgatives should be allowed but the bowels kept regular with a diet rich in waste material, and one or two hours in the open air every day. Hydrotherapy is very useful for its sedative effects. A moist pack for two hours in the evening will insure a good sleep, or a bath before retiring. Cold rubs in the morning, returning to bed for an hour or so afterwards are useful. Narcotics should be avoided, as they lead so easily to addiction; if drugs are necessary some harmless one like valerian should be used. No certain benefit, he remarks, can be realized from commercial ovarian extracts except by the manufacturers. Their action on the patient is very uncertain, but they can be tried. If no benefit follows the taking of a hundred tablets better drop this method of treatment. The tendency to obesity can be combatted by restricting the number of calories in the food and by diligent outdoor exercise. Thyroid extract should be tried only under constant medical supervision, and it should be abandoned at the slightest signs of injury of the heart. He emphasizes the indispensable necessity of curetting the uterus in case of uterine hemorrhage. This is the only means to exclude cancer of the body of the uterus. If the

hemorrhage recurs later medical measures should be tried. If all these fail, then the uterus will have to be removed unless roentgeno-therapy is given a trial. Cystitis is exceptionally common at the menopause, and usually yields to the general measures for its relief.

Miscellaneous.

Radium Treatment of Vegetating Epithelioma of the Cervix Uteri, Primary and Recurrent.

Cheron and H. Rubens-Duval make use of radium in massive doses in the treatment of vegetating cervical epithelioma, as a curative measure. The characteristics of these cancers are soft, friable masses, with large, weak-walled vessels, which easily break and cause severe hemorrhages. These cells are peculiarly sensitive to the radium rays. The tumors do not at first infiltrate and glandular metastases are a late development. The radium is used with careful filtration so as to avoid superficial burns of the vagina, the gamma and the beta rays being used. The application must last 24 or 48 hours; a previous curetting may be an advantage, since it removes a great deal of friable tissue. It destroys the nutrition of the cells and scleroses the blood vessels, finally obliterating them. The hemorrhage and pain are at once relieved, and the patient regains a fair physical condition. These cancers are very unfavorable to operation on account of their rapid recurrence. When a hysterectomy is to be done a previous application of radium and curetting will stop hemorrhage, and remove infected material, and the tissues will be somewhat hardened and thus facilitate the removal. If too much radium is applied it will render the tissues so dense that removal will be very difficult. In cases in which the parametrial tissues are much involved operation is contraindicated, and here radium has a clear field; also in recurrences after operation. The vagina becomes sclerosed and contracted. A severe dermatitis may be caused if the rays are not carefully filtered.—*La Gynecologie*.

Esophagus with Perforations Due to Ulceration Produced by Foreign Bodies.

Kelly reports the case of an imbecile lad, aged sixteen, from whom a coherent statement could not be obtained, but who was suspected of having swallowed a foreign body. The medical man consulted examined him with the x-rays, but finding nothing

abnormal prescribed a purgative, with the result that a dozen acorns were passed. As marked inability to swallow persisted, the patient was sent to the author about two weeks after the supposed accident for examination of the esophagus. At the lower end of Brunings' longest tube when fully introduced a foreign body was encountered; and lying above it were two peas. The body itself was firmly imbedded in the posterior wall of the gullet, and the surrounding mucous membrane presented many granulations. After considerable trouble the body, which proved to be another acorn, was broken up and removed piece-meal. Beneath it a large part of a vertebra, possibly that of a sheep, was found and comparatively easily extracted. As a perforation into the trachea had been detected before operation no food was given by the mouth. In spite of this precaution and efforts to keep the parts clean the patient died a week later. The post-mortem examination revealed multiple abscesses and gangrene of the lungs. The esophagus showed five perforations in the posterior wall, where ulceration had extended to the underlying vertebral column, and one in the anterior wall communicating with the trachea.—*Proceedings of the Royal Society of Medicine*.

Sexual Abstinence.

In a little book ("Sexuelle Neurasthenie," by George Flatau, Berlin), which treats of sexual neurasthenia in the accepted light and in the conventional way, Flatau's most interesting chapter is that dealing with sexual abstinence in men and its effect upon health. Under absolute sexual abstinence he understands not only refraining from intercourse, but also avoidance of all the surrogates for coitus, such as auto and allo masturbation and the various types of sexual excitement which form substitutes for the satisfaction of sexual cravings.

The author believes that if one adheres to this definition, there is practically no individual who can claim to have entirely avoided sexual activities of any kind, an opinion in which Lowenfeld, whose experience in sexology is so extensive, concurs. Lowenfeld has investigated twelve cases of alleged sexual forbearance, and in only three instances did the restrain approach abstinence in the sense quoted above.

Lowenfeld concludes that while under certain circumstances injury to the nervous system may result among men from abstinence, the complaints which ensue are not very severe and seldom produce the more serious type of acute disturbances, either nervous or psychic. The sexually normal

man, who has not diminished his power of resistance against exciting impressions by sexual abuses, may, if he lead a hygienic life, endure abstinence without any considerable annoyance. He also speaks of "permanent abstinence," which indicates that where no marriage is contracted, the abstinence may be prolonged throughout life.

Forel emphasizes that while opinions concerning abstinence are widely divergent, it is certain that the disadvantages have been ridiculously overdrawn and that restraint, even though accomplished at times at great cost, is feasible for both sexes.

Eulenberg, who formerly doubted if neurasthenic symptoms could arise from abstinence per se, has recently modified his attitude. He believes that under the ordinary social environment of the present time, sexual forbearance is advisable for healthy young persons of both sexes and its accomplishment entails little permanent injury to health. He considers the harm done to young people of psychopathic make-up to be merely a concomitant evil. In adult life, however, continued abstinence is an undesirable condition and its maintenance by the average person is a risk, which may lead to undeniable injury. In severe cases we find it producing anxiety-neuroses, sexual neurasthenia, hysteria, and even well developed psychoses.

A large number of notable authors are so convinced that such severe and permanent disturbances of mental and physical ease may be induced by abstinence, that they believe themselves justified in advising patients to indulge in intercourse. Thus Porosz records cases in which pollutions ceased only after normal indulgence; and Gattel found that anxiety-neuroses in a fair proportion of his cases were dependent upon abstinence.

Marcuse, in a valuable monograph ("Dangers of Sexual Abstinence to Health") insists that the impairment to health dependent upon abstinence is an established fact; but admits that this does not entirely speak against the justification of urging sexual abstinence. Both Marcuse and Nystrom present clinical histories which demonstrate the detrimental effects of abstinence.

Flatau himself believes that the advice to be given in the case of a physically healthy young man complaining of nervous symptoms which are dependent upon sexual abstinence but who, for financial reasons, is unable to marry, is to prolong his forbearance, because, in his opinion, the annoyance, the struggle, and the nervous symptoms are inconsequential as compared to the dangers of extra conjugal sexual

indulgence, or the equally noxious practice of masturbation. [Flatau apparently loses sight of the fact that in reality, as supported by his own citation from Lowenfeld, the problem practically resolves itself into the choice between intercourse or some surrogate, which is most frequently masturbation. It also is doubtful whether a young man who complains of nervous symptoms dependent upon masturbation, can be considered physically entirely healthy.—C. P. O.]—*American Journal of Urology*.

A Tracheotomy Tube Worn for Fifty Years.

Thomson has recently demonstrated a tracheotomy tube which had been worn by one patient, on and off, for sixteen years. Frequently the tube was not changed more than once in two years. Altogether the patient had worn a tracheotomy tube for over fifty years. The patient did not suffer from bronchitis more than other people, and she died of senile decay at the age of eighty-one. While all are agreed as to the value of nasal respiration, this case shows that Nature is full of wonderful compensations, and that in certain cases of laryngeal stenosis it may be wiser to put up with a tracheotomy tube than risk uncertain operations with the object of being able to do without a cannula.—*Proceedings of the Royal Society of Medicine*.

Genital Carcinoma.

Carcinoma of the cervix should be treated by extirpation whenever possible. The operative scope in these cases has been enormously extended of recent years by the adoption of the modern radical operation brought into prominence by Wertheim. Whereas by vaginal hysterectomy probably not more than 15 per cent. of the cases presenting themselves were able to be dealt with, the operability rate of the modern operation varies from 40 to 70 per cent. according to the views and practice of the surgeon.

The danger of the operation varies according to the advancement of the growth, the bacteriological content of the vagina and the physical state of the patient.

In a woman otherwise sound and not unduly fat, and with a growth only moderately advanced and not seriously infected, the risk of the operation is probably not above 5 per cent. in expert hands. On the other hand, great obesity, advanced age, physical debility and extensive growth are grave handicaps. Probably the most serious drawback of all is a breaking down, stinking condition of the cervix. Absolute sterilization of the infected area is probably

impossible, so that the operation area is liable to infection from the vagina below the line of amputation.

The prospect of permanent cure depends on the degree of advancement of the growth and also on the thoroughness with which the operation is carried out. A complete cure can be claimed after five years' freedom from signs of recurrence. Most recurrences occur within two years.

When is a case of carcinoma of the cervix not suitable for operation?

First and foremost, when there is extensive involvement of the anterior vaginal wall and the base of the bladder. It is true that portions of the bladder or ureters can be and are excised, but it is undesirable save in exceptional cases. A vesico-vaginal or uretero-vaginal fistula is likely to result, causing great discomfort to the patient, while the prospect of permanent cure in a case so advanced is small. Extension of the growth laterally or backwards is not so serious a matter. Induration of the broad or utero-sacral ligaments is often inflammatory, not carcinomatous. That the uterus cannot be pulled down is no matter, but absolute fixity contra-indicates the operation.

In many cases an examination under an anæsthetic is required to decide the point, and even this sometimes fails. In such a case the abdomen should be opened and the operation perhaps proceeded with, and if it is found possible to separate the bladder it will be able to be concluded. If not, the surgeon must desist and close the wound. These incompleated cases recover satisfactorily from the operation as a rule.

Carcinoma of the corpus is most common during the first ten years following the menopause and its recognition is often difficult. A diagnosis of senile endometritis is frequently made when carcinoma is actually present. An opinion should never be rendered in such conditions until after the state of the interior of the uterus has been operatively ascertained.

Carcinoma of the body should, as a rule, be treated by local abdominal hysterectomy, the cervical canal having previously been closed by suture. With the uterus should be removed both appendages and all the upper part of the broad ligaments.

It is rarely necessary to subject the patient to the severity of an operation as radical as that for carcinoma of the cervix for the track of lymphatic permeation is not the same. The operation would, of course, be much easier than in the case of carcinoma of the cervix, but this is no justification. The inclusion of cases of carcinoma of the corpus in lists of "Wertheim's" operations invalidates such statistics.

An alternative method is vaginal hysterectomy. This is especially suitable for old, stout patients with an atrophic uterus. It is not good practice to perform it when the uterus is enlarged, for in the manipulations necessary to extract it the thinned musculature may give way and allow the growth inside to disseminate.

If a secondary nodule be present in the vaginal wall high up, the case, if it be considered worth while to operate at all, had better be treated by a mitigated form of the abdominal radical extirpation carried out for carcinoma of the cervix. If the nodule be low down Schanta's operation by para-vaginal section is indicated if the growth is otherwise removable.—The London Practitioner.

Iodine Fumigations In Gynaecological Cases.

In an article entitled "L'enfumage iode en gynécologie (Le Progres Medical) Professor Reynes, Marseilles, states that the method of iodine fumigations has been tried with great success by him. He gives the *modus operandi* and the indications of this new and original method in his paper. This method gives excellent results in all uterine affections which may be treated per vaginam, like ulcerative metritis of the cervix, cervicitis, or granular metritis. It is also useful for the disinfection of uterine cancer, after scraping the superficial layers of the tumor. Iodine vapors may also be introduced directly into the uterus, and Professor Reynes is experimenting with this treatment successfully in cases of post-abortion metritis. The *modus operandi* is very simple: After careful swabbing of the vagina and cervix, Professor Reynes introduces into the vagina a small pledget of cotton wool dipped in iodoform, and which has been passed through the flame of a spirit lamp, candle, or match. The combustion of the cotton wool is instantaneous, and the heat of this combustion is sufficient to set iodine free, so that vapors fill the vagina which has been previously dilated with a speculum. A deposit of iodine soon takes place in the vagina and on the cervix. Another method consists in heating the tube of an insufflator and projecting iodoform, so as to bring free iodine into contact with the diseased part. Neither of these methods requires any special apparatus, and may be applied as well in hospital practice as in country practice.—The Dublin Journal of Medical Science.

Meningitis Due to Bacillus Typhosus.

Drs. O'Carroll and Purser gave an account of a boy, aged nine, who had been

admitted to the Hardwicke Hospital as a case of typhoid fever. Widal's reaction was obtained on the fifth day of the illness. None of the usual signs of typhoid were present—no rose spots, no enlargement of spleen, no diarrhoea. On the other hand, the mental condition was most suggestive of meningitis, and headache, retraction of the neck, and Kernig's sign were marked. Typhoid bacilli were grown in pure culture from the cerebro-spinal fluid, which contained as well 1,100 leucocytes per cmm.; of these, two-thirds were polynuclear and one-third mononuclear cells. The patient died three weeks after onset of illness. The membranes over the convexity of the brain were covered with a purulent exudate. Over the occipital lobes the exudate was hæmorrhagic. *Bacillus typhosus* was separated in pure culture from the exudate. The bacteriological examination was made by Dr. T. A. Hughes, I.M.S. There was some slight congestion of the lymphoid tissue in the intestine, and in the right lung were three small patches of broncho-pneumonia. The other organs, including the spleen, were normal.

The patient's chart showed that at two periods in the fever there was a remarkable slowing of the pulse, which was a familiar sign in cases of meningitis. The case illustrated what he had long felt—namely, that any abnormal localization in a specific poisoning is bad. If enteric fever became localized in the lungs or brain it was bad. The same remark, he said, applied to pneumonia, which if accompanied with severe cerebral symptoms was very likely to prove fatal.

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chitis and similiar affections, Cord. Ext. ol. Morrhuæ Comp. (Hagee) is always indicated; nor is it necessary to dwell upon the fact that in scrofulosis, rickets and other diseases of malnutrition, there is nothing better than Cord. Ext. Ol. Morrhuæ Comp. (Hagee), and it has always been relied upon in tuberculosis. On account of its palatability, patients will take it in quantities and long enough to secure results.

Multiple Arthritis of Doubtful Origin.

Fitzwilliams reports the case of a girl, aged fifteen, with the following history. About eighteen months ago the tarsal joints became painful and swollen, first the right and then the left. About four months later the wrists became affected, the left first. The condition has steadily become worse, the pain has remained, but varies from time to time, while the movements of the affected joints have become very limited. Present condition: The patient limps on walking, owing to the pain in the tarsal joints of the right foot; the ankle joints are free. She has pains at night both in the foot and in the wrists. Both wrists are flexed, the left one having no movements at all, while the right one has very slight movement. The synovial membrane of the joints is thickened and the interphalangeal joints of the hands are distended with fluid there has been no abscess formation. The heart, lungs, liver and spleen are normal, and there are no enlarged glands. No history or evidence of syphilis. The treatment hitherto has been carried out apparently under the impression that the condition is tuberculous, for the wrists have been in plaster of Paris for three months. X-rays show very little bony change in the wrists. The condition is thought to be due to a chronic infection and not to tubercle.—Proceedings of the Royal Society of Medicine.

Some Valuable Products for the Treatment of Diseases of Bacterial Origin.

Since the advent of diphtheria antitoxin it is doubtful if any new remedial agent has elicited greater interest than is now being manifested in the bacterial derivatives known as Phylacogens. These products were originated by Dr. A. F. Schafer, of California, the method of preparation and technique of application being first presented to the San Joaquin Medical Society in Fresno. To the uninitiated it may be said that the term Phylacogen (pronounced phy-LAC-o-gen) means "phylaxin producer," being derived from two Greek

words signifying "a guard" and "to produce." The Phylacogens are sterile aqueous solutions of metabolic substances generated by bacteria grown in artificial media. They are produced from a large variety of pathogenic bacteria, such as the several staphylococci, streptococcus pyogenes, bacillus pyocyaneus, diplococcus pneumoniae, bacillus typhosus, bacillus coli communis, streptococcus rheumaticus, streptococcus erysipellatis, etc.

Four Phylacogens are now offered to the medical profession: Mixed Infection Phylacogen (used in the treatment of bacterial diseases of unknown etiology), Rheumatism Phylacogen, Erysipelas Phylacogen, and Gonorrhea Phylacogen. They have been thoroughly tested clinically and are said to be producing excellent results in the treatment of the various pathological conditions in which they are indicated. They are administered hypodermically—subcutaneous or intravenously—preferably by the former method, the latter being advised only in cases in which a quick result is demanded. They are supplied in hermetically sealed glass vials of 10 Co. capacity.

The Phylacogens are prepared and marketed by Parke, Davis & Co., who have recently issued a 24-page pamphlet which describes them in detail—the process of manufacture, therapeutic indications, dosage, methods of administration—everything, in fact, that needs to be known by the man who desires to use phylacogens. Every practitioner who desires to keep abreast of the latest advances in bacterial therapy, should have a copy of this valuable booklet. Write to Parke, Davis & Co., at their general offices in Detroit, Mich., ask for the "Phylacogen pamphlet," and mention this Journal.

Sclerema Cutis.

Galloway reports the case of a man, aged fifty-four, who stated that his malady followed rapidly after he was exposed to a foul atmosphere, the unpleasant odor of which he found difficult to get rid of for an unusually long time. The hardening of the skin followed this incident, and progressed for the following three months. The firm, swollen state of the skin was noticeable from the face down to about the level of loins, and was universal within this area, thought worse in some parts than in others. It was especially noticeable round the neck, over the arms, and the skin of the back. The firm swelling of the skin impeded especially the movements of the neck, the shoulders, and elbow, and gave a peculiar expressionless appearance to the face. Some hardening of the skin

had been noticed about the lower part of the thighs and knees, but had passed off. On the trunk a certain degree of erythema could be noted where the hardening or the skin was greatest or most recent. On the inner aspect of the arms the hardening of the skin was seen to have a lobulated texture. There was no appearance of scleroderma of the usual type nor of morphea at any part of the affected area. The distribution of the affection was practically continuous within the limits of the affected region. A careful physical examination had not revealed evidence of visceral disease, and had not suggested the cause of this unusual affection.—Proceedings of the Royal Society of Medicine.

Cerebral Hyperaemia.

W. Ivanoff (Zentralbl. d. ges. Ther., Hefte 4, 1912) recommends continued cold applications to the head for the treatment of symptoms arising from hyperaemia of the brain. Vasomotor disturbances of purely functional nature, congestion due to mechanical obstruction in the veins, and polyeythæmia are three clinical types of cases to which this form, of treatment is suited. Ivanoff uses a cap fitting closely to the head, for such patients are seldom so ill as to be confined to bed. The ordinary ice bag is therefore impracticable. The cap is made of wood or several layers of linen, and is worn constantly. Patients are directed to dip the cap in cold water, wring it lightly, and wear it till it begins to become warm. The process is repeated, and so the cap may be worn throughout the day. Female patients are directed to wear either parchment paper or very thin oilskin under the cap, in order to keep the hair dry. In some cases it is necessary to wet only a section of the cap. As a method of treatment it has the advantage of wasting no time, and it might conceivably be used in some cases while the patient continues his daily work. Ivanoff has in this manner treated many patients at the polyclinic and in hospital with very good results; The patients have almost entirely been cases of functional disturbances. As a means of symptomatic treatment based on practical experience in Geh. Professor Briger's University Clinic, Berlin, it seems worthy of trial on suitable cases not yielding to other methods of treatment,—Edinburgh Medical Journal.

Treatment of Prolapsus Uteri.

Potocki believes that prolapsus uteri is almost always found in women who have been pregnant, and arises from the fact that they have passed through labor. Aside

from the rupture of the perineum, which may occur at that time, there are various other mechanisms which assist in bringing about prolapsus after delivery. The parts are softened and distended during pregnancy, and the cervix may become much elongated. During gestation, parturition and the puerperal state organic modifications occur which predispose to prolapsus, and lesions occur, some of which are curable while others require operation. Stretching and tearing of the cervix may occur through delivery before dilatation is complete; during labor the head drags upon the connections of the uterus with the bladder and rectum and tears them away from their natural supports. This may be prevented by the watchful obstetrician and the descending parts of the canal may be pushed upward with the hand between the pains and maintained there during the pain, when they will slip upward. Operative labors cause tearing of the ligaments and sphincters. A good preventive measure is dilatation of the vagina before operative accouchements by means of a rubber balloon. This renders extraction easy by putting an end to the resistance of the soft parts. After labor all tears should be repaired at once. The author believes that it is a mistake to allow the woman to get up sooner than three weeks after labor, since the weight of the uninvolved uterus tends to cause prolapse. When there are no tears, but simple relaxation of muscles and ligaments, the author thinks that massage and electricity are valuable to restore the tone of the parts. The pessary is an instrument that not only is not dangerous, but that properly fitted is of the greatest value in moderate prolapse when operation is not desired by the patient. Hard rubber pessaries are most satisfactory, and the smallest that will do the work is most desirable.—*Annales de Gynecologie et Obstetrique*.

Primary Carcinoma of the Lung.

Henrici states that this is a rare affection, occurring approximately once in sixteen hundred autopsies. (2) Probably the majority of so-called cancers of the lung are in reality of bronchial origin. (3) Squamous celled cancers of the lung probably arise in the majority of cases from bronchial epithelium which has undergone a metaplasia. (4) Some of these tumors apparently invade the lung along the alveolar wall, retaining the alveolar septa as stroma.—*Journal of Medical Research*.

Edema in Diabetes Due to Sodium Bicarbonate.

The administration of large doses of sodium bicarbonate for the treatment of the

acidosis of diabetes may be followed by the development of considerable edema. Widal has observed an increase of weight of 10 kilogrammes in fifteen days due to this cause. At a meeting of the Societe Medicale des Hopitaux of Paris on May 10 M. Marcel Labbe, M. G. Bith, and Mlle. Fertyk communicated an important paper on this subject. They have seen a diabetic, who was given 40 grammes of bicarbonate daily for a week, increase in weight eight kilogrammes and show edema of the lower limbs. They have found that the increase of weight in such cases is usually rapid and often amounts to 500 to 1000 grammes daily. The increase in weight has a relation to the dose. Under daily doses of 20 to 30 grammes it is slight or absent; under doses of 40, 60, or more grammes it is usually considerable. Patients do not all react in the same way; some are very sensitive to the drug; in others it seems impossible to produce edema. One patient took as much as 50 grammes daily without increasing in weight. On discontinuing the bicarbonate the edema rapidly disappears.

The mechanism of this edema has been disputed. Widal and others, having observed in several cases concomitant retention of sodium chloride, thought that the bicarbonate had an inhibitive effect on excretion of the chloride, the retention of which in turn caused the edema. However, in three cases now reported to the society, in which 40 or 50 grammes of bicarbonate of sodium were given daily to diabetics, analysis of the urine showed no retention of sodium chloride. It seems, therefore, that the retention of the bicarbonate in the body may produce edema analogous to that due to retention of the chloride. Other salts have a similar action. M. Widal has recently shown that large doses of magnesium sulphate may produce edema. The bicarbonate of sodium edema may be produced in other diseases than diabetes. A patient suffering from Bright's disease with anasarca was treated by eliminating chlorides from the diet, and the edema disappeared. As soon as his weight attained equilibrium from 20 to 40 grammes of sodium bicarbonate were given daily. After 13 days he had gained in weight 3.4 kilogrammes and the legs were edematous. On discontinuing the bicarbonate his weight fell three kilogrammes in two days. During this time there was no retention of chlorides. Yet in consequence of the renal disease, he was predisposed to retention of chlorides. On administering chloride his weight rapidly increased and edema of the limbs and face appeared. In five days he was given 81 grammes of sodium chloride and excreted only 24. On ceasing the administration

the excretion of chloride increased and his weight fell.

Pfeiffer has observed that the administration of sodium bicarbonate in patients other than diabetics, and even in health, causes an increase of weight of several kilogrammes. Hayem has reported that in dyspeptics he has seen an increase of weight from administration of the bicarbonate. However, in consequence of the chemical constitution of the body fluids and of alimentary customs, sodium chloride is the chief regulator of osmotic exchanges and the usual factor in edema.—The London Medical Lancet.

Pathological Changes in Muscles.

Jewesbury and Topley have found that in wasting diseases the voluntary muscles show varying degrees of histological change bearing little relation to the actual degree of wasting present. These changes consist of alterations in the size, shape, and staining reactions in the fibers, increase in the fiber nuclei, and alteration in their arrangement, sometimes resulting in the production of false giant cells; and lastly of a relative increase of the interstitial tissue. In acute general diseases muscle changes are extremely slight, consisting of some degree of hyaline and granular change, and in a certain small number of cases of fatty degeneration. Fatty changes: In certain disorders associated with an abnormal carbohydrate metabolism there is a great increase in the amount of interstitial fat present. In many cases small collections of fat droplets are present in the neighborhood of the fiber nuclei; these are common in advanced life, rare in children, and almost entirely absent in animals. They bear no relation to true fatty degeneration, and it is doubtful if they have any pathological significance. True fatty degeneration appears to be much less common than is usually stated, but occurs to a marked degree in cases of diphtheritic toxemia, in certain blood disorders, and in poisoning by phosphorus. Glycogen: Of the many muscles stained for glycogen it was only strikingly present in each of three cases of diabetes examined. Amyloid change was not found in any case examined.—Proceedings of the Royal Society of Medicine.

Tonic Spasm of the Muscles, Chiefly of the Extremities.

Galloway reports the case of a girl, aged fourteen, who is said to have shown no signs of the present condition of the muscles of the left arm and leg till about Christmas, 1911. She states that she could play the piano readily up to that time. It was then noted that she had difficulty in moving the muscles of the left arm and hand, a condition that has continued and increased

up to the present time. There is similar difficulty in moving the muscles of the left leg and foot. The right arm, hand, and leg appear to move practically normally. On observing the muscles of the left arm and hand they are found to pass into a condition of spasmodic contraction on very slight exertion or stimulation; the contractions resulting relax very slowly. On clasp- ing the hand on any object the grasp of the hand continues for a considerable period of time—many seconds—and it is only after strong voluntary effort or after waiting for some time that the grasp is relaxed. Movements bring about a similar long-lasting spasm of the muscles of the left shoulder. Similar long-enduring spasm affects the muscles of the left leg and foot, causing some impairment of ease in walking. The toes become spread out in a spasmodic manner on attempting to extend the foot, and the calf muscles, as also the extensors of the leg, become firm and remain so for an unusually long time. All movements become easier and more rapidly executed when repeated. The electrical reactions are normal, there is no alteration in sensations, and no definite evidence of increase of reflexes, nor are there involuntary muscular movements. The child is well in all other respects. There is no evidence or history of injury to the head or brain, no headache, vomiting, or sickness, the eye movements are normal, and there are no changes in the fundus oculi. The character of the movements of the muscles suggests "myotonia." It is noteworthy that this condition is stated to have commenced about five months ago, and that no history is obtained of any other member of the family being affected in this way. The affection of the muscles is almost entirely limited to the left side, chiefly the arm and leg. The condition of spasm, although markedly increased on voluntary movement, is probably never entirely absent, and there is a slight suspicion of increase of the tendon reflexes of the lower extremity. —Proceedings of the Royal Society of

The Physician's O.K.

"No more castor oil for me. Laxol is O.K. and it does the business. A. R. Carman, M.D., 27 West 127th Street, New York City." The significance of this positive expression of opinion from a well-known member of the profession, will be apparent to every physician who has noted the look of disgust upon his patient's face, when he has suggested "a dose of castor oil." Laxol is prescribed, specified and insisted upon by doctors all over the civilized earth, because of its purity, palatability and efficacy. A remedy worth knowing.

Salvarsan in Scurvy.

In scurvy the mouth is often the seat of severe lesions, and various types of spirilla can usually be found in the oral secretions. This was the argument which led Tuschinsky and Swaschensow to try salvarsan in this disease, just as it has been used with success in Vincent's angina, noma and similar conditions. Several intravenous infusions, usually of 0.3 Gm., were given to eight cases. The results were remarkable in that the lesions of the mouth usually healed within a week and that the spirilla were much diminished in number, though they never disappeared entirely. The other symptoms of the disease were not, however, influenced, so that salvarsan cannot be regarded as a specific for scurvy.—Muench. Med. Woch.

Nucleinic Acid in Erysipelas.

Believing that an increase in the number of white cells in the blood in erysipelas is desirable, Blumenau has employed injections of the nucleinic acid salt of sodium in this disease. The amounts employed were 1 to 3 Cc. of a 10 per cent. solution into the musculature of the buttocks. The drug proved perfectly harmless and usually caused a prompt fall in temperature. The best results were always seen if the injections were made early in the course of the disease and sometimes it was necessary to give two or three injections. There never was an apparent effect upon the skin lesion. It is probable that the nucleinic acid will help the organism to form sufficient antibodies to combat the disease.—Wratschebnaja Gazeta.

The Sequelae of La Grippe.

Among all of the various acute and exhausting illnesses that afflict mankind, there is none that so generally results in distinct prostration as epidemic influenza, or la grippe. Even the grippal infections which are uncomplicated or unaccompanied by setious organic changes are more than apt to leave the patient in a thoroughly devitalized condition after the acute febrile symptoms have subsided. It is for this reason that the treatment of la grippe convalescence is of special importance. The anemic, debilitated, depressed patient requires a systemic "booster" that will not only stimulate but revivify and reconstruct. It is distinctly wise, in such cases, to commence vigorous tonic treatment as early as possible, preferably by means of Pepto-Mangan (Gude), the hemic builder and general reconstituent. This standard hematonic increases the vital elements of the circulating blood and, by increasing the

appetite and improving the absorptive and assimilative functions, quickly restores both hemic and general vitality.

The Pneumonia Convalescent.

In spite of all of the modern advances in scientific therapy, and the improvements in the general handling and management of acute infectious diseases, acute lobar pneumonia still deserves the title ascribed to it by Osler: "The Captain of the Men of Death." There are, however, especially during the fall and winter months, many cases of the lobar or irregular pneumonia that so often complicates or follows la grippe. When this condition supervenes it is more than likely to follow a sub-acute or chronic course and convalescence is frequently long delayed. Under such circumstances, in conjunction with treatment designed to hasten resolution, a general blood tonic and vitalizing agent helps materially to shorten the convalescent period. Pepto-Mangan (Gude) is of much value in this field, because it not only increases the solid elements of the blood, but also acts as a true tono-stimulant to the organism generally. As Pepto-Mangan is free from irritant properties and constipating action, it is especially serviceable in the reconstructive treatment of the devitalization following the pneumonia of the aged.

Congestive Dysmenorrhea.

Dr. F. H. Davenport, A.B., M.D., Assistant in Gynecology, Harvard Medical School, in his book on "Disease of Women" and under the above caption refers to the treatment of congestive dysmenorrhea and the use of anodynes. He says, "It is by all means wisdom to avoid in these cases, if possible, all the use of stronger sedatives and anodynes."

In referring to the use of medication in these cases, Dr. Davenport, in this most excellent work on "Non-Surgical Gynecology," says: "Hayden's Viburnum Compound has seemed to be the most effectual remedy of this class, given in hourly teaspoonful doses in hot water, for five or six times."

That Hayden's Viburnum Compound is of inestimable value in the treatment of dysmenorrhea is not only indicated by its employment by gynecologists of today, but in the past by no less an authority than J. Marion Sims, who prescribed it and recommended its employment.

Hayden's Viburnum Compound is not a narcotic and contains no habit-forming drugs. It is a product of known composition and as a uterine sedative it holds first place in the opinion of many physicians as

not only a dependable therapeutic product, but a remedy which is safe to administer to their patients. Given in teaspoonful doses, administered in hot water, it will prove most effective.

Treatment of Syphilis in Pregnant Women.

Pamard reports facts concerning four syphilitic families which he had under observation for periods of twenty to thirty years. In all but one, the husband had followed treatment only irregularly, and the first children borne by the mothers were dead and macerated. In the succeeding pregnancies Pamard administered to the mothers a pill containing one mg. of mercury bichloride each morning with breakfast, adducing reasons such as ease of labor and puerperium, or æsthetic considerations, in order to allay suspicion on the part of the mother. In each case, the next infant was born healthy. In one instance, however, the mercury having been omitted by mistake before a third pregnancy, a hydrocephalic child was the result. In none of the cases, moreover, did the mother show at any time any evidence whatsoever of syphilitic infection. In cases such as these, the uterine mucosa can alone be the seat of maternal infection and the remainder of the system is uninfluenced. It is inadvisable to use salvarsan in pregnant women and infants, as mercury has yielded uniformly excellent results and is without danger to life.—Bull. de L'Acad. de Med.

Treatment of Varicose Ulcers, Specific and Non-Specific.

In October, 1911, Dr. Metam, Bucharest, published an interesting paper on the treatment of syphilitic chancre by hectine, the benzo sulpho-para-amino-phenylarsinate of sodium, in which he confirmed the favorable reports of the remedy of MM. Hallopeau and others. In these cases the chemical was given either by the mouth or hypodermically. We should also mention that Hallopeau also used it as a prophylactic (Soc. de Med. de Paris, January 11, 1910) with success. Drs. Levy-Bing and L. Doreau (de Saint-Lazare) have recently been using the powdered hectine and an ointment of the drug as a topical application to varicose ulcers, syphilitic and non-syphilitic. The ointment consists of one part of hectine to nine parts of lard or petroleum. Their successes are reported in an illustrated article in the *Gazette des Hopitaux*, May 7, 1912, and are such as no other remedy has as yet given.—Dublin Journal of Medical Science.

To Make Hazing a Crime.

Everything that tends or threatens to cut short the span of human life or add to human pain and suffering comes within the province of the broad domain of Medicine; and while "hazing" comes properly within the tenets and teachings of pedagogics and educational polemics, yet its effects in the past on human life and limb justifies its consideration in the pages even of an ephemeral medical publication.

The death of a student at the University of North Carolina from hazing and the probable fatal injury of an Ohio schoolboy from similar rough treatment by his school-mates, as well as many other like lamentable instances that are well within the memory of the present generation, call attention to the need of a definite remedy for such exhibitions of student brutality. One is suggested by the action of the President and trustees of the North Carolina institution in petitioning the Legislature to pass a law making college hazing a criminal offense.

That is what the law regards similar acts of personal violence by boys not at college, and there is no valid reason why they should be condoned when committed by students. The academic tradition has too long survived in this particular, and the theory that youths pursuing a college education constitute a privileged class should be exploded.

Hazing is but another name for "horse-play," and while it may be very amusing at the time to the hazers it is only too often rather rough on the hazee—the boys may like it, but how about the frogs! Half a century ago "horse-play" was quite extant with the medical classes garnered and gathered from city, town and village, as well as from entirely rural environment; but we are gratified to know that it has of late years gradually become more and more obsolete with the young men who are just entering the temple devoted to the grand science and art of medicine.

A very sad incident comes vividly to mind, although the trials and tribulations of more than fifty years intervene, so vivid indeed, that it may bear brief relation. The scenes of the dissecting room in our student days were grewsome indeed, and especially so to the raw, unsophisticated country youth; and for that matter, some of those reared amid the madding throng of our most populous cities, from mental characteristics or inherent natural tendencies may faint at the mere sight of blood, especially if it is flowing from the tissues of a fellow being—and the first visit to a dissecting room may well "strike terror to the soul" of one who in the days to come may add the "boldness of the lion to the gentleness of a woman."

Adjoining the anatomical room of our Alma Mater was the wash-room, and all medical colleges were then, as now, arranged along pretty much the same lines. Around three sides of the wash-room was fixed a zinc-lined trough, about thirty inches from the floor, six or eight inches deep and twenty-four to thirty wide, with the ordinary hydrant taps placed about one-and-one-half or two feet apart and at a convenient distance above the trough. An ample supply of soap and towels completed the equipment. Fires were not permitted on the floor—usually the upper one of the building, as the preservation of anatomical material was not perfected to the degree that now prevails, and the art of plumbing was in its incipency, the heating appliances of the present being an unknown quantity.

Whenever a new recruit to the Aesculapian ranks would faint on his entrance to the room, an immediate rush would be made for him by his future colleagues and associates who had become accustomed to the grim environment; and while still unconscious, he would be quickly borne to the wash-room, laid lengthwise in the zinc-lined trough and as many taps fully turned on as would extend the length of his body or beyond. At the first dash of the cold water, as a rule, he would be aroused from his syncope and endeavor to "get out of the wet," which would often be forcibly resisted by his tormentors.

Among the matriculants at the beginning of my second year, a quiet, refined but somewhat delicate young man from a rural section of this State, well educated, having received both collegiate B.A. and A.M., made his first appearance in the dissecting room on a bitter cold November night. The regular sessions in that day beginning with November, with an optional "preliminary course" in October. The *mise en scene* was too much for his sensibilities—the partly eviscerated and dismembered bodies, the odors and other incidentals made such an impression that he fell to the floor unconscious. The yell of "FRESH FISH" rang out and he received the usual treatment of those days.

The result: A violent attack of double pleuro pneumonia about ten days later, from which after many days "hovering on the brink," he recovered sufficiently to go on with his studies, only to succumb to an attack of pulmonary tuberculosis a little over a year after receiving his degree of M.D. A valuable life wasted on the very threshold of possibly many years of usefulness. However, we can with an extreme degree of gratification state from personal observation and connection with medical

schools for more than thirty years just flown by, "horse-play" of that character has gradually but finally become a thing of the past. Other incidents of like character coming within our personal observation from time to time as the sickle has been put among the days, we most heartily and earnestly commend and endorse the correct views emanating from the "Old North State."

Hazing has declined at the larger universities by reason of the measures taken against it by the college authorities and as the result of unfavorable undergraduate sentiment. But its suppression should not be left to inadequate agencies of college discipline. Its survival at the smaller colleges justifies the North Carolina plan of putting on the State the burden of dealing with it as with other juvenile misdemeanors and crimes.—The Southern Practitioner.

Antityphoid Inoculation.

Concerning the use of typhoid vaccine in the treatment of actual cases of enteric fever, there is difference of opinion. From an experience with such treatment amounting to about 50 cases the author concludes that inoculation with typhoid vaccine is a most valuable method of treatment. Small doses did neither good nor harm, but when the dose was increased from 50 to 100 millions every third day excellent results were obtained. The enteric facies disappeared, the patients felt better, and in two or three instances even asked that the vaccine be repeated. The size of the spleen seemed to be reduced, and the flow of urine increased. As to the temperature, the result of vaccination is to raise it in the following twenty-four hours about 1° F. above that which might have been expected; but it soon falls, to a lower point than before inoculation. About the third day after inoculation it tends to rise again. Another injection is given, and the same result follows. Finally, the temperature touches normal, and remains there. There was in cases treated with the vaccine a very notable absence of severe complications and of tendency to relapse. As to the relative advantages of using a stock or an autogenous vaccine, the author thinks the former gives the better results. As to dosage, one may start at 50 millions and cautiously increase to 100 or 150 millions.—Leishman, Glasgow Medical Journal.

Cholelithiasis.

According to the author's experience, the following indications for operation in cholelithiasis appear to be established, though the question has nevertheless to be decided in each individual case after care-

ful consideration of all the factors concerned:

1. Acute cholecystitis should be treated medically; only the most severe form, cholecystitis acutissima, belongs to the surgeon.

2. Chronic relapsing cholecystitis should be operated only when all agencies of medical therapy have failed.

3. Operation is indicated in chronic obstruction of the ductus choledochus if two or three months of medical treatment are without effect. In cases with prolonged remittent fever, rigors, and bad general condition, operation is unquestionably indicated.

4. Hydrops vesicæ felleæ demands operation only if there are persistent and very severe irritative phenomena.

5. Empyema of the gall-bladder and all suppurating processes in the region of the gall-bladder and in the liver demand operation.

6. Adhesions about the gall-bladder should be treated medically so long as the inconvenience produced is not marked. In the most severe cases operation is required.

7. Acute and chronic pancreatitis resulting from cholelithiasis belong to the surgeon.

In the drug treatment of cholelithiasis the author has found salicylic acid of chief value. Sodium salicylate with extract of belladonna he has often found valuable. He does not believe that salicylic acid benefits by its cholagogue action, but that its chief influence is upon the inflammatory symptoms. The best results were seen in acute and chronic cholecystitis, especially with simultaneous rest in bed and the application of hot compresses. In such cases he gives from two to four times a day a powder of sodium salicylate, 0.5 Gm. ($7\frac{1}{2}$ grains), and extract of belladonna, 0.01 to 0.02 Gm. ($\frac{1}{8}$ to $\frac{1}{4}$ grain), dissolved in warm water.

The value of the oil cure has not proven very great in his hands. It can be useful only for the simultaneous colitis and spastic constipation not infrequently complicating cholelithiasis.

In severe cases of biliary colic with constant pain and high fever, the author gives calomel in doses of 0.06 Gm. (1 grain) every hour for the first three to five doses, then every two hours until the first typical calomel stool appears, not exceeding eight doses a day. Striking results are frequently obtained, though how calomel acts in these cases, as in other liver affections, has not as yet been satisfactorily explained.

Abundance of fluid is very useful for gall-stone patients. The water is best given on an empty stomach, and as hot as possible, cold liquids frequently inducing attacks of

colic. All patients should drink in bed about an hour before breakfast one to two tumblers of hot water, in like manner a tumbler in the evening before retiring, and smaller quantities frequently during the day. Dilution of the bile can also be effected through the rectal injection of water. In Carlsbad enemata of Carlsbad sprudel cooled down from 40° to 50° C. are employed, the patient retaining them as long as possible up to an hour. These injections are especially useful in chronic jaundice, and are also to be recommended where the free use of water by the mouth appears inadvisable on account of a coexisting atony or dilatation of the stomach and where intestinal catarrh is present.

In the dietetic treatment of gall-stone patients, the ordering of frequent but small meals—at least five a day—constitutes the first principle. All excess in eating must be avoided, though this should not be so interpreted as to lead to undernutrition. All foods difficult of digestion, or easily decomposed and leading to fermentation, must be forbidden. Foods should be taken minced or in puree form, and very cold foods are as much to be avoided as cold drinks. There is no special gall-stone diet, recommendation or exclusion of certain foodstuffs being unjustified unless special gastrointestinal complications, or accompanying diseases such as gout and obesity, require the protein, fat, and carbohydrate to be specially regulated.

Rest is to be insisted upon in the first attack of biliary colic, and the patient should be kept in bed for several days after each attack, even when it passes off quickly and gives rise to no further discomfort.

In cases remaining free from colic for long periods and presenting no inflammatory manifestation or local tenderness physical exercise is one of the most important factors in treatment. Among bodily movements the author lays stress on deep breathing exercises. Certain gymnastic exercises, carefully carried out, are also especially to be recommended. All brisk movements, however, such as severe shaking of the body and heavy lifting, should be avoided. Massage of the liver and gall-bladder is deleterious.—Mayer, in *The London Medical Lancet*.

Massage in Wasting Diseases of Children.

McPhail states that massage has received a great deal of attention in nervous and in surgical conditions, and that in wasting diseases of children it may effect an improvement when the nursing and natural exercise have been defective.—*British Journal of Children's Diseases*.

WHEN NATURE FALTERS

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Treatment of Amebic Dysentery.

The author describes a new method of treating amebic dysentery and hepatitis, consisting of hypodermic injections of soluble salts of the alkaloid emetine. Vedder shows that this substance, the principal alkaloid of ipecacuanha, has the power in high dilutions of destroying amebæ in broth cultures; the author confirms this by testing the effect of emetine hydrochloride on *Entamoeba histolytica* in dysenteric stools. When mucus containing numerous active amebæ was placed in the alkaloidal solution, the pathogenic organism was immediately killed and materially altered in its microscopic appearances by a 1:10,000 solution, while after a few minutes they were rendered inactive and apparently killed by as weak a solution as 1:100,000. Administration of emetine hydrochloride hypodermically in a few cases of amebic dysentery yielded excellent results. It did not produce vomiting, even though in the same cases ipecacuanha given by mouth had done so; the alkaloidal salt was at first given in doses of $\frac{1}{6}$ grain (0.01 Gm.), this being equal to 15 grains (1 Gm.) of ipecacuanha. In the latter cases $\frac{1}{3}$ grain (0.02 Gm.) and even $\frac{1}{2}$ grain (0.03 Gm.) were given without producing any ill effects on the patient, though their action on the disease was magical. The hydrobromide of emetine might also be given, but it is not quite so soluble as the hydrochloride. An advantage of the method is that the drug can be given even when the administration of ipecacuanha by the mouth is impracticable.—Rogers, British Medical Journal.

Cramp of Writers and Telegraphers.

True occupational cramp, in the author's opinion, is genetically psychological. Analysis of many cases shows it to be dependent upon the pre-emption of the muscles by a tic, which prevents the proper performance of the professional act. The tic is, of course, psychogenetic, and it is the cause of this that must be attacked if treatment is to be successful. The patient's belief in physical causation may be hard to remove; these cases must therefore be frequently seen. The measures used are: (1) Psychic readjustment, so that the patient may understand what he is trying to do. Time may be required to achieve this. (2) Psychomotor discipline in the form of exercises graded by the physician. The temporary physical disabilities from which the notion of incapacity may in the first place have arisen are of minor importance. Psychological reconstruction is the keynote to the treatment.—Williams, Journal für Psychologie und Neurologie.

Erythema Nodosum. Associated with Mammary Tuberculosis.

Weber reports the case of a rather delicately built woman, aged forty-seven, who had previously had no serious illnesses, and had apparently enjoyed good health. She was admitted to the hospital April 6, 1912, suffering from a chronic swelling in the right breast of at least two months' duration, which had not caused her much pain. This was excised on April 9 and found to be tuberculous, the microscopical sections containing many characteristic giant cells of the tuberculous type. On admission she was likewise suffering from florid erythema nodosum affecting both legs up to just above the knees, and there was a little pyrexia. The erythema nodosum, which had commenced about March 30, almost completely disappeared by the end of April. The patient had not been taking any drug, such as potassium iodide, which might be supposed to be connected with the onset of the erythema nodosum. There was no history of syphilis. She had had twelve children, nine of whom were still living, and no miscarriages. A good deal of attention had been given, especially on the Continent, to the occasional association of erythema nodosum with tuberculosis, a connection which had been recognized and described by Landouzy in 1907.—Proceedings of the Royal Society of Medicine.

The Doctor His Own Surgeon.

Reclus has commented on the courage and stoicism necessary for the act of what he calls "autotomy," or surgical operation upon one's own body. He has described at some length four examples of this heroic procedure. The first story is that of a French surgeon who, having acquired a small outgrowing tuberculoma of the right index finger following an operation wound, determined to excise it under cocaine anesthesia. This he did, surrounded by his class, in a curiously unsurgical way, by fixing the instrument—first a scalpel, then a sharp spoon—in the left hand and performing all the necessary movements with the diseased right hand. In spite of this novel technique the result was quite satisfactory. His only discomfort was a little nausea at the unpleasant sensation of scraping his own periosteum; this was, however, corrected by a sip of hot coffee. In the second case the surgeon operated on himself for bilateral ingrowing toe-nail, apparently without pain and with absolutely satisfactory result. The hero of the third story was a Turkish military surgeon attached to Professor Reclus's own clinic, who was operated on for double inguinal hernia under local anesthesia with such

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complete success that he determined to remove for himself a troublesome varicocele. The procedure was quite painless and the result perfect. The fourth "autotomy" was performed by M. Regnault, a naval medical officer, who was led to undertake a radical cure of his own hernia. He anes- thetized the area of operation by injecting cocaine into the several layers of tissue concerned, after a preliminary injection of morphine into the subcutaneous tissues of the thorax. He guarded himself from disaster by enlisting the help of two colleagues, who stood by prepared for action in case they were needed. However, all went well, and there was neither pain nor mishap.—The London Lancet.

The Treatment of Scarlet Fever with Moser's Serum.

Schick lays down the following principles that should govern this method of treatment: (1) The treatment should be applied only to those cases of doubtful prognosis and to those ordinarily fatal. (2) The injections should be made as early as possible, preferably during the first two days of the disease. The third day decides whether the treatment will be successful or not. After the fifth day of the disease the serum has no effect. (3) Cases most suitable for the treatment are those with toxic scarlet fever and those in which the throat complications are absent or are markedly developed. (4) Only those sera should be employed whose efficiency has been demonstrated. (5) The amount of serum to be injected is 200 c.c. In children up to one and a half years of age the amount should be 100 c.c. (6) All other therapeutic measures should not be omitted, especially all those that are designed to save the heart. Moser's serum is the only remedy of value in the toxic cases of scarlet fever. In these cases one should inject the serum not as a last resort but early in the course of the disease.—Therapeutische Monatshefte.

Rare Complications of Exostoses.

Sourdats notes among the complications of exostoses the following: Pressure effects on the skin and nerves; painful contractions of overlying muscles; the development about the exostosis of a serous bursa which may become inflamed, and the detachment of a piece of cartilage from the surface of the exostosis, and its presence as a foreign body in the bursal sac. Of greater rarity is the ulceration of blood vessels lying in proximity to the exostosis, or the traumatic fracture of the exostosis itself. The author reports a case of each of these accidents. One was that of ulceration of the peroneal

artery by an exostosis of the tibia. The other was that of fracture of an exostosis of the lower end of the femur.—Archives Provinciales de Chirurgie.

Spirocheta Phagedenis—A New Species.

Noguchi has succeeded in isolating a hitherto undescribed spiral organism in pure culture from a case of mild phagedenic ulcer on the external genitalia of a woman. For this organism the name *Spirocheta phagedenis* is proposed. *Spirocheta phagedenis* is a strict anaerobe and grows in the presence of fresh tissue in ascitic agar. It produces no apparent change in the media, but a somewhat offensive odor develops in the culture tube. *Spirocheta phagedenis* incites a slight inflammatory reaction in the skin of a *Macacus rhesus* monkey and in the skin and testicles of rabbits. Its etiological relationship to the phagedenic lesions on the external genitalia has not yet been determined.—Journal of Experimental Medicine.

American Public Health Association.

At the recent annual meeting of this association held in Washington, D. C., under the presidency of Dr. John N. Hurty, of Indianapolis, Ind., the following officers were elected: President, Dr. Rudolph Hearing, of New York; first vice-president, Dr. W. R. Batt, of Harrisburg; second vice-president, Dr. James Roberts, of Hamilton, Ont.; third vice-president, Dr. J. F. Mon- jarez, of San Luis Potosi, Mexico; secretary, Professor Selskar M. Gun, of Boston; treasurer, Dr. Livingston Farrard, of New York; executive committee, Dr. J. R. Porter, Dr. W. G. McKay, and Dr. J. K. Anderson, of Washington. [Next year's meeting will be held in Colorado Springs.

Epilepsy of Cardiac Origin.

Mouisset and Gatte state that in the course of a prolonged and persistent asystole the alterations in the circulation of blood in the brain, the presence of toxic substances, and the vascular and inflammatory lesions in the brain combine to produce a hyperexcitability of the latter organ. This may express itself in crises of true epilepsy or of related psychic manifestations.—Revue de Medecine.

Bilateral Edema of the Ethmoidal Septum in Sinus Suppuration.

McKenzie reports the case of a young man who illustrated a type of septal edema. The ethmoidal portion of the nasal septum on both sides presented a smooth, rounded, and boggy swelling, which on the right

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side was so considerable as to occupy the whole of the upper meatus of the nose. Microscopical examination showed that the swelling was due to simple inflammatory edema.—Proceedings of the Royal Society of Medicine.

Malignant Endocarditis in a Child Aged Eight Years.

Duperie (*Gaz. Hebdomadaire des Sciences Médicales de Bordeaux*) records the case of a boy who had suffered from headache and fever for ten days, and was admitted to hospital with a diagnosis of typhoid fever; the ordinary symptoms of that disease did not develop and Widal's reaction was negative. The boy wasted and the pulse became rapid, being often 140 to 160, while the temperature hardly rose beyond 100.5° F. There was a soft apical systolic murmur, but no sign of enlargement of the heart, and slight pericardial friction at the base. There was some disseminated bronchitis, and the urine contained a trace of albumin. After six weeks of fever the blood gave a pure culture of staphylococci; from this a vaccine was prepared and 100 millions were injected; a week later 200 millions were injected. The temperature became more oscillating, and a swelling was found in the left hypochondrium, at first thought to be an abscess, but later found to be an enlarged spleen. An attack of articular pains supervened after which the temperature became lower, but the liver as well as the spleen became enlarged and tender. The child became more and more cachectic, oedema appeared, then purpura, and finally death occurred after an illness of four months. The autopsy showed ulcerating vegetations on the mitral valve, great congestion of the lungs and liver, multiple infarcts in the spleen and kidneys, with acute nephritis. The case is reported on account of its unusually slow progress in a child.—*British Journal of Children's Diseases*.

Operative Treatment of Postpartum Hemorrhage.

Kehrer (*Munch. med. Wochenschrift*) in a case of severe atonic hemorrhage successfully employed the following procedure: The abdominal cavity was opened by a short longitudinal incision and the uterus drawn out. An assistant quickly constricting with the hands the isthmus region and the uterine and spermatic arteries, a double silk thread was inserted first on one side and then on the other from below upwards through the fascia, parietal peritoneum near the upper angle of the wound, and the parietal peritoneum and fascia in the lower

portion of the abdominal incision. By tying this double thread the round ligaments, uterine vessels, lateral portion of the cervix, infundibulo-pelvic ligaments and spermatic vessels were secured, while all the lateral vessels of the internal genitals were ligated with a thick ligature. By means of a third and fourth suture at the lower and upper angles of the wound the anterior and posterior wall of the cervix was fixed to the peritoneum and fascia, except a small place which later was closed with catgut. The fundus was removed with Paquelin or knife, and the cutaneous incision closed by the application of Michel's clamps. The operation could be quickly done, only three minutes being consumed in applying the lateral ligatures and only ten in the entire procedure. During the abdominal incision the median basilic vein was exposed by an assistant, and immediately after ligation of the two lateral uterine ligaments an intravenous saline infusion of about 1,000 c.cm., with addition of 0.4 synthetic suprarenin, was given.

Treatment of Malignant Tumors with Mesothorium and Thorium.

Czerny and Cann (*Munch. med. Wochenschrift*) says that these preparations are at least equal in efficiency to radium, and from their experiments it seemed that their superficial action was even more marked. For this reason they appear to be superior to radium in the treatment of superficial cancers, angiomas, lupus, or keloids, while their effect upon tumors as determined by microscopical examination was similar. The best results were obtained in lupus and angiomas, which subsided rapidly, though carcinomas and sarcomas were more refractory. Mesothorium, however, is not to be regarded as a specific against cancer, but as a very serviceable local remedy in combination with other treatment. Altogether 125 cases were treated including 85 carcinomas, 12 sarcomas, 8 lympho sarcoma, 1 endothelioma, 6 angiomas, and 8 tuberculomas. In 19 of 23 cases of recurrent cancer of the breast distinct subjective and objective improvement could be noted. Thorium X was tested in only 36 cases, comprising 31 of cancer and 5 of sarcoma, being introduced either into the tumor, administered intravenously, or used in both ways. The intravenous administration sometimes caused unpleasant constitutional effects and frequently local reaction consisting of redness, sensitiveness, and swelling of the growth, followed by shrinking and hardening. Direct introduction to the remedy into the tumor was generally well tolerated and usually gave rise to more or less hardening of the mass. Al-

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though the time is too short to permit of positive deductions Czerny states that in 40 to 50 per cent; of the cases a beneficial effect upon the growth was observed, particularly from mesothorium.

Does Cholecystenterostomy Divert the Flow of Bile from the Common Duct?

Archibald (The Canadian Medical Association Journal) brings forward experimental evidence to show that the operation of cholecystenterostomy does not divert the flow of bile from the common duct, and that therefore it is not the operation of choice. Dogs were operated on, and in eight cases an anastomosis was made between the gallbladder and an isolated loop of gut, one end of which was sewed up, while the other end was implanted into the abdominal wall so as to discharge its contents externally. In none of these cases did more than a few c.c. of bile escape into the gut, although at autopsy the aperture connecting the gallbladder and the intestine was found to be large and patent. As the author states, "The natural conclusion would seem to be that, unless the obstruction to the common duct is considerable, and bids fair to be permanent, in cases of subacute or chronic pancreatitis it is useless to do a cholecystenterostomy in the expectation of securing permanent bile diversion." He says that in view of the experiments, and from the fact that in cases treated by cholecystenterostomy a much freer flow of bile is obtained, this is the operation of choice in cases of chronic or subacute pancreatitis.

Operative Treatment of Fractures.

Frankenstein (Deutsche Zeitschrift für Chirurgie) concludes that, especially in the treatment of fracture of the shaft of the tibia, in which fracture it is difficult by conservative methods to replace the fragments or to keep them in position once they have been replaced, the open operation with fixation by means of plates and screws is very highly to be recommended. Also, in fractures of the femur which show no tendency to healing, or which have healed in very bad position, open operation gives very satisfactory results. Fractures of the humerus with marked displacement at points well removed from the joints afford a suitable field for this form of operation. In fractures close to the elbow-joint bone suture will always remain a two-edged sword. So far as the ulna, the olecranon, and the patella are concerned, he has had better

results with suture than with plates and screws.

The Action of Salvarsan and Neosalvarsan on the Wassermann Reaction.

McDonagh (British Medical Journal) says that taking all the stages of syphilis he has found that three to seven injections are necessary to cure most cases of the disease.

There is no doubt that many cases in the tertiary stage can be cured with neosalvarsan which failed to be cured with salvarsan.

The writer says that the alterations in the Wassermann reaction as the result of treatment are most constant, and when tested at short intervals give a much safer guide to regulate treatment than by saying that just so many injections will be required, or, as the old syphilologists used to teach, that a three years' pill treatment was sufficient for all cases alike.

He advises his patients to have a provocative injection of neosalvarsan six months or a year after they have been discharged, and the blood tested forty-eight hours, the seventh, fourteenth, twenty-first, and twenty-eighth day after that injection. He adds that all his cases for some months past have had three to nine injections of salvarsan, given at seven to fourteen days' interval, or three to seven injections of neosalvarsan, given at not more than seven days' interval, with not a single bad manifestation or a recurrence of symptoms.

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Pellagra Conference.

The second tri-ennial meeting of the National Association for the Study of Pellagra was recently held in Columbia, S. C. Surgeon-General Rupert Blue, United States Public Health Service referred to the meeting as "An Epoch-Making Congregation of Scientists, who have banded together for the solution of a problem of national and international importance."

Dr. J. W. Babcock, of Columbia, presided over this meeting in a most acceptable and dignified manner. His address was one of deep thought, and contained many valuable points. His subject was: "How Long has Pellagra Existed in the United States?"

Physicians from various sections of the country, and from the canal zone, number-

ing about 150, were in attendance at the first days' sessions. The zeists and anti-zeists were much in evidence. The question of the origin of the disease, whether of corn or of insect, was debated at length; and a considerable stir was caused by Dr. W. E. Deeks of the isthmian canal commission, who introduced cane sugar as a product responsible for pellagra.

"I believe," said Dr. Deeks, "that it is not corn alone, but any cereal or starch food in connection with cane sugar, in a warm climate, where there is lessened metabolic activity, and consequent inadequate elaboration of digestive elements, which initiates the auto-intoxication responsible for the symptom-complex known as pellagra."

"The reasons why pellagra is on the increase as shown by statistics are two," read Dr. Deeks from another part of his paper. "First, a better knowledge of the disease, and consequently more cases are reported. Second, and more important, because the consumption of sugar has increased inordinately in all civilized countries."

The doctor stuck to his position in spite of much opposition.

The prevalence of pellagra in the United States was sufficiently established to warrant to the fullest extent the existence of such an organization as the national association is. Numerous pellagrins were reported as having been found in the Southeast, notably in Kentucky, Virginia, North Carolina, South Carolina, Alabama, Georgia, Mississippi and Louisiana, as against practically none in the Northwest, it was presented very conclusively also that pellagra prevails to a greater extent among women than among men, and among whites more than among negroes. There are 1,880 cases reported for South Carolina, while Georgia is given the greatest number having 4558. There is no telling, it was said, how many cases remain unreported.

Treatment of Empyema.

Dufour (Bulletins et memoires de la Societe medicale des hopitaux de Paris) presents a new method of ascertaining the indications for pleurotomy in empyema, which takes into account a fact brought out in 1906 by Widai and Gougerot, viz., that in pneumonic and cardiac patients an aseptic purulent pleurisy sometimes develops, the prognosis of which, without operation, is entirely favorable. Although this form of empyema is particularly characterized by an absence of degenerative changes in the polymorphonuclear cells, Dufour finds it simpler to decide for or against pleurotomy according to the presence or absence of micro-organisms. Smears of pus obtained by exploratory puncture are fixed and stained with carbolized methylene blue and examined. If bacteria, which, when present, are numerous, are found, pleurotomy is indicated. If not, the operation is unnecessary; at most, a simple puncture, to give the patient relief for the time being, may be required in a certain proportion of cases.

While Dufour does not aver that these indications hold good absolutely in every case of purulent pleurisy, since, to his knowledge, a patient with putrid pleural disease recovered without pleurotomy, he presents evidence in the form of case records to the effect that exceptions are but

rarely met with, and states his belief that the simplicity of the procedure advocated will render it of value to the general practitioner.

Treatment of Acute Gonococcal Arthritis.

Ramond (Progres medical) reports having obtained good results in cases of acute gonococcal arthritis of moderate severity by subcutaneous injection of the fluid obtained by puncture from the involved joint. After disinfecting the skin with tincture of iodine, the joint is evacuated and ten c.c. of the fluid obtained set aside. Sterile air is injected into the joint in amount equal to the fluid removed, and also into the periarthritic cellular tissues. The subcutaneous injection of fluid from the joint is then given, after which the joint is firmly bandaged and placed at rest in a trough. As soon as pain permits, mobilization and massage of the joint are practiced. The puncture and subcutaneous injection of fluid are repeated every six or eight days, if required.

The effect of the treatment is to diminish the pain and swelling, cause the effusion to disappear, and prevent ankylosis and atrophy in all but rare instances. Some cases were cured by a single injection; only exceptionally were favorable results not noted after the third injection.

The danger of infecting the patient by injecting the intra-articular fluid is but slight, as it is well known that the gonococcus disappears from the joint within a few days after its involvement. All risk, moreover, can be eliminated by heating the fluid to be injected to 45° C. for half an hour; the fluid preserves its biological properties, but contains no more living gonococci.

Treatment of Spastic Bronchitis.

Goppert, (Berliner Klinische Wochenschrift) reports good results in the bronchitis associated with a spastic condition of the musculature of the air passages in young children from the use of ethyl carbamate (urethan). The pronounced restlessness and cyanosis accompanying the condition are especially favorably influenced by the drug. In infants less than three months the dose recommended for internal use is 0.5 gramme, in the first year 1.5 gramme, and in the second year two gramme. Where the drug is given by rectum, the dose is permissible after forty-five minutes. The drug is both effective and devoid, for practical purposes, of the dangers attending the use of chloral hydrate.

The CHARLOTTE SANATORIUM

LABORATORY-DEPARTMENT

CHARLOTTE, N. C.

The attention of the physicians and surgeons is called to the advantages which this institution offers in methods of laboratory diagnoses.

Many physicians through lack of time, technical training or laboratory equipment find it difficult to utilize the many methods of microscopic and clinical examinations so essential to a proper diagnosis.

To the physicians and surgeons of the Carolinas and Virginia, the Charlotte Sanatorium Laboratory offers, at moderate cost, facilities for such examinations. Animal inoculation, chemical, bacteriological and histological examinations will be made as the case requires.

The following directions are suggested for the benefit of those who may forward material for examination.

All specimens should be accompanied by a brief note descriptive of the clinical condition and a special reference to the character of the examination desired.



The Main Building Front View.



Seventh Street Entrance.

The name and address of the person to whom the report is to be sent should be clearly indicated.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test.

— After carefully washing, prick the lobe of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and allowed to dry without being spread out on the surface of the slide. After they have dried, the

allowed to dry without being spread out on the surface of the slide. After they have dried, the

slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—

Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count, etc., should be sent to the laboratory on glass slides. As thin a smear as possible should be made.

Smears For The Detection of Gonococci.—

One drop of purulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made over the surface of the slide.

In collecting a specimen from a female patient, care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.



Clinical Laboratory, Showing Arrangement of Desks, Microscopes, Microtomes, Incubator, Centrifuge, Etc



Clinical Laboratory, Showing Autoclave, Hood, Operating Tables, Etc.

eration or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiled paper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and the material from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in the bottom of the jar before

Urine.—for bacteriological examination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlich's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Pathological.—material from either op-

the tumoris dropped in.

Feces.—should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

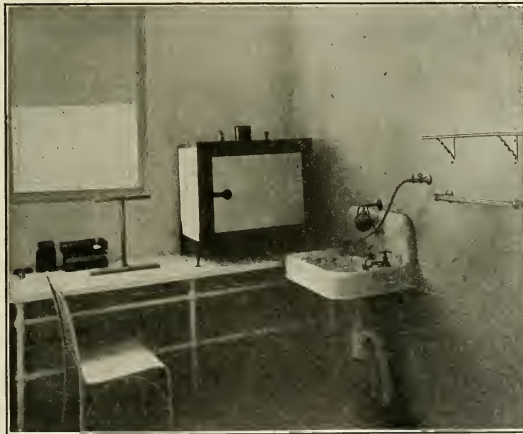
Wassermann's Test.—Since the advent of the discovery of 606 for the cure of Syphilis, the employment of the Wasserman test, both before and after its use, is conceded by all scientific investigators to be of the highest importance as a control to the curative effect of this remedy. The Charlotte Sanatorium Laboratory is specially equipped for carrying out this Wasserman Sero-diagnosis test for Syphilis.

Specimens sent to the laboratory for this test should be obtained as follows.

1st. By using an ordinary antitoxin syringe, and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourniquet applied, taken the blood from the vein by means of the syringe



(Clinical Laboratory, Showing Supplies, Working Table, Etc.)



Clinical Laboratory, With Hot Air Sterilizer, Scales, Lavatory, Etc.

to coagulate, cork, pack and mail as any other fragile package. At least two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.—The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.—should be sent in a sterilized bottle. A large vaseline or quinine bottle usually answers the purpose.

2nd. By means of capillary attraction, as illustrated in Fig. 11 represents empty capsule; tourniquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tube, allow



Fig 1



Fig 11.

swab 50 Bacterial Cultures 1.00 Sterilized solution.. 5.00 Spinal Puncture and Analysis 5.00

Address all specimen to the Charlotte Sanatorium Laboratory, Charlotte, N. C.

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J. P. MATHERSON, M. D., SEC'Y AND TREAS.

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J. P. MUNROE, M. D.,

EYE, EAR, NOSE AND THROAT

A. M. WHISNANT, M. D., J. P. MATHESON, M. D.

DISEASES OF DIGESTION

W. O. NISBET, M. D.

PATHOLOGIST and BACTERIOLOGIST, HARVEY P. BARRET, M. D.

The following table gives the cost of many of the examinations made in this laboratory:
Smears and Stains (tubercle bacillus,) gonococci, etc. \$1.00

Blood.

Hemoglobin and Erythrocytes 1.50
Leucocytes..... 1.00
Differential..... 1.50
Malarial parasites 1.00
Complete analysis 3.00

Urine.

Chemical 1.00
Microscopical ... 1.00
Complete analysis 1.50

Pathological Sections.....5 00

Feces Examination 2 00
Blood Culture ... 5.00
Cultures and isolation of bacteria..... 5.00
Stomach Contents 2.00
Widal Test..... 2.50
Tissue Sections.. 5.00
Tuberculin Test 5.00
Wassermann's Test 10.00

Milk.

Chemical 2.50
Bacterial 5.00
Water analysis, bacterial examination.. 5.00
Chemical examination including alkalinity, chlorides, ammonia, nitrites and nitrates ...5.00
Quantitative analysis \$10.00 to 25.00
Culture Media (per tube) 25
Sterilized tubes and pipettes 15
Coagulation time 2.50
Vaccines 10.00
Sterilized Tubes with

Sterilized solution.. 5.00 Spinal Puncture

State Board Examination Questions of Nevada.

ANATOMY.

- 1-2. Give location of the coronary sinus and its length. What valve guards its termination?
3. Describe the circle of Willis.
4. Give origin, insertion, and action of the rectus capitis anticus major muscle.
5. What organs are supplied with blood from the celiac artery?
6. What is a synarthrodial joint? Give an example.
7. Give location of the capsules of Bowman.
- 8-9. Give description and location of Cowper's glands. What glands in the female correspond with Cowper's in the male?
10. Name the nerves that supply the tongue with taste, sensation, and motion.

PHYSIOLOGY.

1. What inorganic salts does muscular tissue contain?
2. What is the specific gravity of human blood? (a) What is the relative weight of the blood to the body?
3. What functions have the leucocytes?
4. What are enzymes?
5. What is lymph?
6. What part does the liver play in the general nutrition of the body?
7. What is the origin and significance of urea? (a) Normally, what per cent. does urine contain? (b) What quantity is eliminated in twenty-four hours by the healthy adult?

MATERIA MEDICA AND THERAPEUTICS.

1. Write a complete prescription for a cathartic pill—not official—containing at least three active ingredients.
2. Define a mixture, a sinapism, a lotion, a liniment.
3. Give the habitat of ipecacuanha, coca erythroxylon, cascara sagrada, strophanthus.
4. Describe the physical properties of tr. ferri chloridi, acidum salicylicum, liquor plumbi subacetatis.
5. Write a prescription for a diarrhea mixture containing at least three drugs.
6. Name three remedies you might use in a case of typhoid fever. Give reasons.
7. Differentiate the physiological action of opium from chloral hydrate.
8. In heart conditions, when would you use nitroglycerin, strychnine, strophanthus, digitalis?
9. Give proportionate dose for child of two weeks, one year, and adult. Give exceptions.
10. Give a classification of cathartics, with example of each.



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CHEMISTRY AND TOXICOLOGY.

1. Write the chemical formulæ to represent the reaction that takes place in boiling Fehling's solution with diabetic urine.
2. Write three prescriptions in which a chemical change takes place. Give results.
3. Give the chemical name for Epsom salt, Rochelle salt, tartar emetic, copperas, blue vitriol.
4. Describe a method for detecting arsenic.
5. How would you prepare an antidote for arsenic?
6. Differentiate acute alcoholism from concussion of the brain.
7. Give the symptoms and treatment of a case of cannabis indica poisoning.
8. What is the cumulative effect of digitalis?
9. Give symptoms and treatment of a case of attempted suicide by a mineral poison.
10. Give symptoms and treatment of a case of attempted suicide with a vegetable poison.

BACTERIOLOGY.

1. Describe in full one method of staining for bacteria.
2. Describe the *Diplococcus lanceolatus* of Fraenkel and the method of staining for it.
3. Differentiate between the *Micrococcus catarrhalis* and the *Micrococcus intracellularis meningitidis*?
4. Define epidemic, endemic, pandemic, bacillus, toxins, alexin, facultative anaerobic.
5. Describe the *Streptococcus erysipclatis*?
6. Differentiate bacteriologically between diphtheria and tonsillitis.
7. Describe the spirochete of Vincent's angina.
8. How would you determine the presence of pathogenic bacteria in milk?
9. Given a specimen of sputum, how would you determine whether the tubercle bacillus was present or not?
10. If you were a health officer what means would you take to prevent the spread of a contagious disease?

PATHOLOGY.

1. Differentiate between carcinoma and sarcoma.
2. Give in detail the pathology of the first stage of lobar pneumonia.
3. Give the lesions occurring in a case of amebic dysentery.
4. Describe the pathological changes that occur in hypertrophic cirrhosis of the liver.
5. Give the microscopical appearance of the blood in progressive pernicious anemia.
6. Give the pathology of chronic paren-

chymatous nephritis.

7. What do you mean by the term "malignant growth?" Give examples.
8. Give the pathology of acute interstitial myocarditis.
9. Give the pathology of amyotrophic lateral sclerosis.
10. Describe the two chief degenerative changes in a tubercle.

PRACTICE OF MEDICINE.

1. How does dysentery differ from ordinary diarrhea?
2. Differentiate empyema and pleurisy with effusion.
3. What are the physical signs of aortic regurgitation?
4. Outline the area of normal liver dullness.
5. What are the causes of endocarditis?
6. How do human beings acquire tape-worm?
7. Mention the causes and symptoms of gastralgia.
8. Give the physical signs of a cavity of the lung in pulmonary tuberculosis.
9. What is bronchorrhea?
10. Why does ascites occur as a consequence of cirrhosis of the liver?

OBSTETRICS.

1. Give pathological anatomy of a vesicular mole.
2. Give etiology and diagnosis of rachitic pelvis.
3. What effect has placental syphilis upon the fetus?
4. Give cause of intrauterine amputations.
5. From what month does the placenta date?
6. What is the principal cause of eclampsia?
7. What position does the uterus assume during the first three months of pregnancy?
8. What are the most grave gynecological diseases to anticipate after delivery?
9. Describe an operation for tubal pregnancy.
10. Give clinical history of ruptured uterus.

SURGERY.

1. What are the symptoms of air embolism? (a) Give treatment. (b) Surgical operations in what regions are most liable to be followed by this accident?
2. What is the first surgical principle in the treatment of infected wounds? (a) Give in minutiae your treatment of infected wounds.
3. Give treatment of rattlesnake bite.
4. Reduce a dislocation at the elbow, both bones of the forearm backward. (a) Give after treatment.

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5. Give technique of operation for appendicitis.

6. What is Pott's disease? (a) How would you treat this condition?

7. Describe burns of the first, second, and third degrees. (a) Give treatment.

8. For the cure of what disease is neurectomy employed? (a) In what cases may success be expected? (b) Give technique of operation.

9. What are the symptoms of complete and partial injury of the spinal cord?

10. Give treatment of lymphangitis.

GENITOURINARY AND DERMATOLOGY.

1. How would you treat a case of urethral chill?

3. What are the symptoms and treatment of gonorrheal rheumatism?

3. Give symptoms of stone in the bladder.

4. What are the symptoms and treatment of acute prostatitis?

5. How would you treat a case of chronic posterior urethritis?

6. What are the causes, symptoms, and treatment of verruca?

7. Describe seborrhea.

8. What is hypertrichosis?

9. What are the causes, symptoms, and treatment of vitiligo?

10. Give the diagnosis and treatment of an epithelioma.

Obstipation of Four Months' Duration from Megasigmoid.

Luria reports a case of Hirschsprung's disease in a young woman which differs from the ordinary type of megacolon. The patient before the present attack was used to attacks of fecal retention lasting from a few days to several weeks and terminated by copious spontaneous evacuations. She came under observation on the twentieth day of one of these attacks and the author began to control the case with the x-ray and endoscopy as well as by ordinary physical diagnostic procedures. The present attack was associated with pregnancy. Considering her ailment the woman's general condition was surprisingly good. Her appetite was somewhat diminished. Meteorism was not in evidence nor were there any symptoms of autointoxication. The sequence of the history is not given, the author being chiefly concerned with establishing the diagnosis of megasigmoid. His claim that the fecal retention is the longest on record may not take cognizance of extreme cases in hysterical subjects.—*Deutsche medizinische Wochenschrift*.

Ninth Annual Meeting of the American Society of Tropical Medicine.

Reported by Dr. Creighton Wellman.

The ninth annual meeting of the Ameri-

can Society of Tropical Medicine was held at the Hotel Rudolph, Atlantic City, on June 3rd the day preceding the opening of the sessions of the American Medical Association.

Both in attendance and interest the meeting was a successful one. President Joseph H. White, of New Orleans, made a pleasing and efficient presiding officer and the discussions were held to time limits, with a corresponding increase of interest and value.

After the President's address on the "Eradication of Malaria," which was of extreme practical and authoritative interest, and the reports of the Secretary and Treasurer, the regular program was taken up. Among the papers were one by Henry J. Nicholls, of Washington, D. C., on the "Biological Characteristics of *Spirocheta pallida* and *S. pertensis*," and another by C. S. Ludlow on "Entomological Points for the Worker in Tropical Medicine." Dr. Ludlow's paper was illustrated by many interesting charts and was carefully discussed by Drs. Wellman and Goldberger.

Dr. Creighton Wellman announced that Dr. C. C. Bass, in charge of the Tulane School of Tropical Medicine's Malarial Research Expedition to Central America, has reported successful cultivation of the malarial parasites *in vitro*. This announcement was later also made before the Section of Pathology of the A. M. A. and attracted much attention and discussion.

Dr. Wellman also reported upon the recent work on leprosy by Duval and himself, exhibiting specimens, cultures, photographs and sections.

The afternoon session was given up to a symposium on "Beri-beri," and consisted of the following papers: The first was a "Summary of the Literature on the Etiology of Beri-beri," by John W. Swan, of Rochester, N. Y. Among the other papers was one read by Creighton Wellman on "Experiments by himself and Bass with Louisiana Rice with Reference to the Etiology of Beri-beri." The experimental condition in fowls was shown, together with photographs and specimens. The most interesting experimental animal died en route. It was brought out in this investigation that not only polished rice, but also cane sugar, corn starch, a mixed diet with oxalic acid, semi-starvation, and probably other methods will produce a Beri-beriform polyneuritis in fowls.

The session was closed by a paper on "Gangosa," illustrated with photographs, by G. L. Angeny, of Philadelphia, and by the description of a "Malarial Hot-bed within Sight of the National Capital," by Thomas W. Jackson, of Fort Washington.

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CHARLOTTE, N. C.**

Among those who discussed the last paper was Charles F. Craig, of Washington, D. C.

The officers elected for the ensuing year are: President, E. R. Stitt, of Washington, D. C.; Vice-Presidents, R. A. Strong, of Manila, and Creighton Wellman, of New Orleans; Secretary, John M. Swan, of Rochester, N. Y.; Assistant Secretary, Allen J. Smith, of Philadelphia; Treasurer, C. L. Forbush, of Philadelphia.—New Orleans Medical and Surgical Journal.

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can be used for therapeutic purposes. Light penetrates to some depth, as is shown by sensitized papers placed in the spinal canal, the mouth, or the vagina. Photographs have been obtained with the chemical radiator of Foveau by placing positive sensitive paper in the vagina supported by red wadding, with the arc before the abdomen at a distance of 50 cm. The use of solar light or the arc light directed on the abdomen in prolonged sittings has a drying effect on certain cases of metritis and salpingitis. Radium is of great use in gynecology. The radium tube is placed in the vagina, covered with a metallic tube, inclined so that the powder gravitates toward the diseased region. It has a powerful sedative, regressive action of the same nature as the X-rays. Radio-therapy is of value in diagnosis and in the treatment of fibromata. After ablation it is of use to prevent recurrence of cancers. Its use relieves pain markedly. The author claims to have seen the cessation of severe pains, hæmorrhages, and regression of the glandular metastases and of the tumors themselves. In a case of cancer of the bladder and uterus that was inoperable the pain and hæmorrhages were relieved, and the bladder, which at first was much contracted, increased in size so that a larger amount of urine could be retained. Some fibromata degenerate into carcinomata. The author applied the X-rays in two cases in which, from the color, pain, and cachexia, he inferred that this process was taking place. The result was an astonishing amelioration. All fibromata are favorably affected, the earliest treated giving the best results. Irradiation may cause abortion and sterilization in the human subject. Examination of ovaries that had been submitted to the rays showed the absence of follicles, all of which had become degenerated. The effect of this sterilization is valuable in the cure of fibromata. The more recent and the more hæmorrhagic the fibroma, and the older the patient, the better the results.—*Gaz. de Gyn.*

Asthma with Swollen Middle Turbinals.

Peters reports the case of a woman, aged forty-two, whose illness began eighteen months ago with paroxysmal rhinorrhea, lately the patient has developed asthma, which is worse at night. The nose presents a condition of chronic rhinitis; the inferior turbinals are swollen. The middle turbinals are edematous and compress the septum. This last condition is characteristic of nasal asthma.—*Proceedings of the Royal Society of Medicine.*

The X-Ray Treatment of Splenic Enlargement in Children.

Petrone and Lo Re report their results in eight cases. The results were poor in one case of Leishman anemia and one of anemia splenica pseudoleucemica. In one case of malaria with greatly enlarged spleen the x-ray treatment, together with the administration of quinine, was very effective, although hitherto quinine and arsenic alone had proved valueless. In four cases of anemia splenica pseudoleucemica the spleen was brought back quickly to its normal size. Another case was greatly improved, but died of bronchopneumonia.—*La Pediatria.*

"Elixir Saloform Comp., Flexner." Contains 20% alcohol. An efficient remedy for rheumatism, gout, cystitis and uric acid solvent. Prepared for physicians' prescriptions only. Robinson-Pettet Co., incorporated. (See page xiv this issue.)

Link the Past with the Present.

J. Marion Sims many years ago said, "For severe Dysmenorrhea I have found Hayden's Viburnum Compound of great service."

What was true as to the therapeutic value of Hayden's Viburnum Compound in the time of Sims is just as much of a fact today. As a remedy in the treatment of Dysmenorrhea, Amenorrhea and other functional irregularities of the uterus and its appendages, H. V. C. is dependable in action, and as it is of known composition and contains no narcotics it is safe to prescribe.

As a uterine tonic and antispasmodic it is of particular service, and to any physician who desires to clinically demonstrate its therapeutic action samples and literature will be forwarded upon request to New York Pharmaceutical Co., Bedford Springs, Bedford, Mass.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm names of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

"that the ice bag is distinctly harmful in appendicitis and should never be used," is the logical deduction of Dr. A. M. Fauntleroy, Surgeon U. S. Navy, basing his opinion upon seventy cases operated.

Like morphine, ice not only obscures the true condition, but decreases Hyperemia, Leucocytosis and encourages stasis in the part to which it is applied. What seems evident in applying ice in inflammation of the appendix must hold true in inflammatory processes where elsewhere manifested.

That hot moist heat is the logical therapeutic agent in treating inflammation must be apparent, as it increases Hyperemia, Leucocytosis and reduces stasis in the part to which it is applied

The convincing evidence of the convenience, serviceability and above all the reliability of antiphlogistine as a thermic agent in the treatment of inflammation is best appreciable by its application thick and hot to the affected part.



This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribed. No "just as good" allowed.

Chronic Colitis.

Lochead in the Edinburgh Medical Journal, reviews some recent contributions and says that ulcerous colitis as met with in Britain is preceded by long-continued signs of weakness in the mucous membranes of the colon. Some of the cases began shortly after parturition or abortion. After the weakness comes chronic irritation, with an increased secretion, from the crypts of Lieberkühn and a desire to go to stool. Slowly following on the irritation comes ulceration, marked by the presence of blood pus, and offensive stools, and by a condition of profound toxemia. The lesions rarely give rise to perforation of the bowel or abscess of the liver. The associated toxemia constitutes the danger to life.

It is well to note that the severity of the symptoms does not correspond with the severity of the local lesion, but pain is often a marked feature. Though anemic the patient may not lose flesh, and he may seem to be merely listless and lezy, though the sigmoidoscope reveals a serious lesion. The anus loses its tone, and as soon as it is dilated a foul-smelling discharge escapes. The blood-vessels of the mucosa bleed easily when they are touched. The general condition depends on the toxemia, of which the temperature forms a trustworthy guide. The urine may show the characters associated with chronic Bright's disease. Occasionally colitis leads to a generalized peritonitis or localized abscess.

Three clinical types of the disease are to be distinguished: Grave cases with diarrhea or hemorrhage; less severe cases of mucomembranous colitis, ulcerative or not, with spurious diarrhoea; and cases of colitis, with constipation as a more or less marked symptom.

Segond holds that surgical treatment is never indicated at the outset but should only be understood in a grave case in which medical treatment has proved a failure. On the other hand, operation should not be looked on merely as resort in apparently hopeless case. It ought to be practiced before the large intestine has become greatly thickened and sodden with inflammatory products. If it fulfils its promises, appendicostomy will come to be performed at an earlier stage than at present, to aid medical treatment. Acute exacerbations

coming on in the course of the disease, grave hemorrhage, and threatenings of obstruction are further indications for operative treatment.

The principles on which the surgeon acts are to keep the diseased bowel at rest by procuring deviation of the intestinal contents, as in ileosigmoidostomy and the establishment of an artificial anus; to cleanse the canal by copious irrigations and to act directly on the lesions by medicinal agents, as in appendicostomy and cecostomy. Along with these measures an attempt should be made by means of vaccine therapy to render the tissues immune.

The establishment of an artificial anus has usually been carried out too late, and the mortality has been high. As it is difficult to ascertain how far up the colon the lesions extend, and ileostomy is not to be recommended, colostomy should be done as seldom as possible. A cecal anus is best, and this mode of treatment will always have a place in urgent cases, to afford immediate rest to the colon. The early results of cecostomy are good, but the permanency of the improvement is doubtful, and it is only rarely that the artificial anus can be closed, unless ileosigmoidostomy is first performed.

For the treatment of colitis by ileosigmoidostomy, it is essential that the rectum and sigmoid flexurs should be free from disease, hence in dysenteric colitis, which furnishes the majority of surgical cases, it is usually contraindicated. In certain cases of mucomembranous colitis, and in those in which constipation is the predominating symptom, it may be performed at the outset, but Segond thinks that even in these conditions it is advantageous to begin with appendicostomy, and only if it fails to have recourse to ileosigmoidostomy. With regard to technique, the space between the apposed mesenteries of the ileum and sigmoid colon should be obliterated by sutures to prevent the risk of subsequent strangulation. In cases of stricture of the colon or tumor around it, it may be necessary to combine ileosigmoidostomy with partial resection of the colon. At present total colectomy is still on its trial, but Segond is of the opinion that the incurable nature of ulcers of the large intestine, the profound changes in its wall, and cicatricial kinks may indicate the performance of an extensive, if not total, colectomy.

Except in extremely grave cases in which cecostomy is preferable, appendicostomy or fistulization of the cecum is the operation of choice.

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No. 5.

Pellagra.

By Geo. C. Mizell, Atlanta, Ga., Formerly Associate Prof. Physiology and Gastro-enterology, Atlanta College of Physicians and Surgeons; Gastro-enterologist to Wesley Hospital and Georgian Hospital.

. PELLAGRA.

Definition.—Pellagra is a progressive chronic disease, characterized by exacerbations which usually occur in warm weather and occasionally in cold weather. The pellagrous individual is one in whom the normal olein, palmitin and stearin have been in part replaced by the unstable fat, linolin. This takes place when linolin is the predominating fat in the food. Clinically the disease is characterized by dermatitis and gastro-intestinal symptoms. Cerebro-spinal symptoms often appear in the course of the disease.

Etiology.—It is a well known fact that the fat and fatty compounds of the body are influenced by the character of ingested fat. A reference to the chemical technology of fats and oils shows that linolin is widely distributed in nature, and, when present in the food, it may occur, to some extent, in animal fat and fatty compounds. The following oils contain linolin in notable per cent:

Pumpkin Seed Oil:

French—Huile de courage, huile de potiron.

German—Kurbissaninöl, Kurbiskernöl.

Italian—Olio di zucca.

Maize Oil, Corn Oil:

French—Huile de maïs.

German—Maisöl.

Italian—Olio de mais, Olio di granturco.

Kapok Oil:

French—Huile de kapok.

German—Kapoköl.

Italian—Olio di kapok.

Cotton Seed Oil:

French—Huile de coton.

German—Baumwollsamöl, Cottonöl.

Italian—Olio di cotone.

Sesame Oil, Beniseed Oil, Gingelli Oil, Teel Oil:

French—Huile de sésame.

German—Sesamöl.

Italian—Olio di sesamo.

Brazil Nut Oil:

French—Huile de noix de Brasil.

German—Paranussöl.

Italian—Olio di noci del Brasile.

Poppy Seed Oil:

French—Huile d'oeillette, Huile de pavot.

German—Mohnöl.

Italian—Olio di papavero.

Sunflower Oil:

French—Huile de tournesol.

German—Sonnenblumenöl.

Italian—Olio di girasole.

Walnut Oil, Nut Oil:

French—Huile de noix.

German—Nussöl, Wallnussöl.

Italian—Olio di noce.

The theory of linolin as the cause of pellagra may be stated as follows:

It is proposed: (1st) that when linolin predominates in the fatty food of an individual it is deposited in the tissues as linolin and linolyl compounds.

(2nd) That linolin and linolyl compounds, by virtue of their unstable nature, readily undergo oxidation in marked contrast to olein, palmitin and stearin, which are among the most stable organic compounds in the animal body.

(3rd) That fat and fatty tissue containing linolin and linolyl compounds in excess are unfit for performing the functions designed for normal fatty tissue.

(4th) That the end products of oxidation in the case of linolin differ from those of olein, palmitin and stearin.

The only point that can be raised in opposition to either of the four propositions is in regard to the adaptability of linolin as a substitute for olein, palmitin and stearin in animal tissue. The difference in the chemical and physical properties of these fats seems to settle this question.

Bear in mind that this theory does not postulate the action of the neutral fat linolin as being a poisonous or toxic agent upon its entrance into the body, but that it gradually accumulates in the absence of other fatty food and when it is in excess in the fatty tissues and fatty compounds it renders these tissues and compounds unstable.

Nothing outside of our observations has been found upon which to base a conclusion as to just what period of time is required for this transition, but this period is evidently measured by years. Certain tissues undoubtedly retain their constituents longer than others. For example, it is reasonable to suppose that the residence of fat in adi-

pose tissue is of longer duration than fat in the skin. Certain individuals may use up their fatty tissue and replace it more rapidly than others. The state of an individual's health also plays a part in the destructive and constructive metamorphosis of this tissue.

It appears that it is necessary for oil to be consumed for not less than a year and when the time has been so short there is always a history of excessive use. These patients have used the fat exclusively, and in many cases have seasoned boiled vegetables with it and have eaten much of fried foods.

Almost invariably the pellagrin admits that he eats more greasy food than any other member of his family. This is especially true when the pellagrin and other members of his family have previously enjoyed equal health.

In getting the history of oil consumption the past eighteen months should be covered. Much difficulty is occasionally experienced owing to the ignorance of some as to what they are eating. An intelligent patient states that he raises his own hogs and renders his own lard; denies visiting anywhere for any length of time. His wife supports these statements, yet it is finally shown that he has bought hogless lard for eighteen months prior to his first attack. An intelligent grocer states that he sends the lard from his own store, and never uses anything but pure lard. Upon request, he exhibits six empty buckets, only one of which is labelled "lard."

One significant point that may be mentioned here is that, except in children under one year of age, all pellagrins, about four hundred in number, that I have had the opportunity of making an investigation, have been cotton seed oil consumers. It is hard to believe that this association of oil consumption with pellagra is accidental.

We have recognized the fact that many people have consumed cotton seed oil in some of the various forms for years without apparent injury, and this has led to inquiry among our patients not suffering with pellagra as to how many were eating cotton seed oil and how long they were using it. The results were as follows:

Forty-eight per cent. were users of cotton seed oil products;

Eighty per cent. of them date the beginning of its use within the past three years;

Many of these patients showed symptoms of pellagra.

When we admit that the fat of the body has long residence therein, requiring months for any given area of fat to be utilized and replaced from the food which enters the

body; that adipose tissue may remain intact for months, or even years, it becomes clear that the pellagrin will be liable to attacks just so long as his adipose tissue contains linolin. Also, that by rapid reduction of the adipose he will become immune to attacks until the linolin is re-introduced into his body.

Thus the period of accumulation or eradication becomes very variable according to the diet, health and individual disposition towards fat. We find such variations among our cases.

There is reason to believe that if linolin does not exceed a limited per cent. in a mixture of fats it will, on account of the ease with which it undergoes oxidation, be utilized before the more stable fat, thus being removed from the body and not accumulating in harmful amounts.

Just here it is interesting to note the physiological law which governs the deposit of fats. This law and this theory explain why the dermatitis is always more severe on the extremities and face when all parts are equally exposed to sunlight. Physiological compensation probably operates to reabsorb and transport the more liquid fats to the extremities, thus explaining the recurrence of dermatitis in these parts as long as three to twelve months after a previous attack, even though linolin has been excluded from the diet.

We were able to fix the number of years of oil consumption in seventy-three of these cases, as follows:

I had eaten cotton seed products 1 y'r before first attack			
10	"	"	"
16	"	"	"
12	"	"	"
10	"	"	"
10	"	"	"
2	"	"	"
6	"	"	"
2	"	"	"
1	"	"	"

Age and Sex:—All ages appear among our cases. The infant comes into this world with a store of fat which is not used up in the first few months of extra-uterine life. Its fat is derived from the mother's food, passed into her milk. Of one hundred cases, thirteen are under twenty years of age; sixty are between twenty and forty years; and twenty-seven are over forty.

Seventy-nine out of one hundred cases are females. It is interesting to note that at the extremes of life this great preponderance of females is not so marked. Of nine under fifteen years of age, five are girls, while of those over fifty years of age, nine are women and five are men. The preponderance of gastro-intestinal disorders among women in this section, together with disturbances incident to female sexual life, may account for the difference in incidence in the sexes. Sixty-three per cent. of gastro-

intestinal cases coming for treatment are women. It is a notable fact that pellagra in the otherwise healthy is rare and it cannot be doubted that chronic diseases, such as some female disorders, predispose to pellagra. Roberts, of Atlanta, a disciple of Samborn and the author of a book written in support of the Simulium theory, has recently repudiated the book by setting forth a theory based upon the greater incidence of pellagra in women. About the same idea was advanced by Beall, of Texas, more than a year ago. Roberts combines Beall's suggestion of a day-biting insect with Thorington's, of Alabama, mosquito, and arrives at the conclusion that pellagra is transmitted by a day-biting house mosquito. Jennings, of the Thompson-McFadden Commission, does not find such an insect in the pellagrous district of Spartanburg, S. C.

In institutions for the insane, where pellagra prevails, the incidence is more nearly divided between the sexes. Here the sexes are more on the same footing as regards health, i. e., they are more equally diseased and sexual influences are to some extent eliminated. In the extremes of life, i. e., in the young and old of each sex, sexual influences are more nearly equal, while in middle life these influences are most marked in women. It cannot be doubted that the disturbances incident to female sexual life predispose to pellagra.

Residence:—In designating the residence, no cases are classified as urban unless they have lived in the city for two years when the first attack of dermatitis appeared. Those living in towns of less than three thousand inhabitants are classified as rural. Of my cases, sixty two per cent. are urban. The incidence of pellagra among farmers is entirely confined to those who are using cotton seed oil products. As a whole, the Southern farmer eats more grease and greasier food than the city dweller. Also the poorer classes of the cities in the South are lovers of fried foods and greasy vegetables.

Seasonal Incidence:—The month of incidence of 170 attacks of dermatitis is as follows:

January, 2;	July, 31;
February, 2;	August, 8;
March, 17;	September, 4;
April, 24;	October, 2;
May, 39;	November, 0;
June, 40;	December, 1.

We have expressed the belief that pellagra is a progressive chronic disease, characterized by peculiar exacerbations. The exacerbations consist of dermatitis and aggravation of gastro-intestinal and cerebrospinal symptoms.

The underlying cause of the chronic process is the character of tissue, which seems to serve its purpose fairly well under some conditions and poorly under others. When certain influences intervene an exacerbation occurs. The sunlight of summer is the most potent agent in exciting these exacerbations. The effect of this season upon the life processes is well known. The functions of the normal body are depressed and weight is lost. The sunlight affects the fat of the skin and underlying tissues, even the brain is penetrated. Oxidation is increased, and waste products accumulate. The tissue of the pellagrin is very susceptible to the injurious effects of the chemical ray of the sun. The fat of the skin is oxidized, producing dermatitis. The ray penetrates and promotes chemical changes in the fat of adipose tissue, muscle, nerve, brain, etc. Such effects are recognized in normal individuals in the tropics. The oxidation end products circulating in the blood and excreted by the mucous membranes and skin exert toxic effect. Furthermore, there is no reason why these end products do not promote changes in the unstable fatty tissues just as fermentation is accelerated in sound oil by the addition of a small amount of oil that has already been fermented.

According to the same process of reasoning we have an explanation of the dermatitis on covered areas of skin, also the winter incidence of the disease.

Thus to produce an exacerbation in the winter it is only necessary to introduce into the circulation through the alimentary tract fermented cotton seed oil or fermented corn products.

Prognosis:—We are beginning to know now that the average case of pellagra is not the deadly malady that we believed it was a few years ago. Properly handled, pellagra is not as serious as typhoid fever, small pox or amebic dysentery. We often see cases who have had the dermatitis annually for six or seven years and a few thirteen or more years. When we go carefully into the amount of fat consumed, whether the product is a mixture of linolin with olein, palmitin and stearin, and whether there has been interrupted or continuous consumption, we can calculate with some degree of accuracy just how grave the attack will be. It is a common custom among farmers to buy an oil product in the fall of the year for use until "hog killing time." Attacks occurring in these periodic oil eaters are mild, while the continuous consumer is severely affected. Unmixed oil products produce a more serious condition and produce them more quickly than the mixed product. It is easy to understand

now why all cases coming for treatment a few years ago were serious and usually fatal. These patients all came from among the continuous oil eating city dweller, while now the disease is more generally recognized in rural places and many of our patients are from among the intermittent oil eaters.

Knowledge of the nature of the disease has changed what was formerly an unbecoming, repulsive duty into the most pleasant and successful part of our work. We can now reassure our patients and enjoy with them the pleasure that comes with assurance of successful results and ultimate return to better health.

In the senile the outlook is usually grave. This is especially true when diarrhoea and mental symptoms are present. Surviving the pellagra, their constitutional resistance is so lowered that they fall an easy prey to infectious diseases. One condition alone justifies even a guarded hope for ultimate return to good health. When a test meal gives free hydrochloric acid, the prognosis is always good and offers the only hope for the aged. Persistent clay colored stools are frequently present when the patient is old, and indicate gravity. Much depends upon the stage in which the case is presented for treatment. Many attacks of pellagra pass and the patient often recovers without treatment. Many cases would probably recover and stay well without treatment, but it is doubtless true that every attack does more or less permanent damage. When there has been recent exposure to sunlight, no prognosis should be given until a week has elapsed. Typhoid pellagra may be precipitated by exposure alone, and the prognosis here is always grave. In seasonal pellagra, the skin lesions indicate nothing beyond recent exposure. When they involve the covered surfaces it indicates very unstable tissue. Nausea and vomiting and diarrhoea are to be regarded as grave so long as they last. Recently developed nervous and psychic symptoms do not alone furnish grounds for a grave prognosis, but when they have persisted for some time, permanent damage may be expected. Winter attacks are less grave because favored by seasonal influences. When the attack comes early in the hot season, the patient will greatly improve his condition by going to a cold, dark climate as soon as the serious symptoms have been overcome.

Diagnosis:—The average case of pellagra is easy to identify. For the sake of statistics, no case should be classified as pellagra unless the characteristic dermatitis is present, yet there are probably many cases who never present this lesion. Diagnosis can

be made by the dermatitis alone when this symptom is characteristic.

The most common early symptom is a fairly characteristic tongue. Early in the course of the disease the tongue is unusually sensitive and of a peculiar red around the edges and tip. Often there is a spot on the dorsum which is red, sensitive, and lacking in some layers of epithelium. Some cases complain of burning in the stomach, oesophagus and mouth; often the tongue alone is so affected. These symptoms often occur throughout the summer and winter, but are seldom continuous. The pellagra often gives a history of early constipation, followed later by diarrhoea in the warm season. Constipation in the beginning is to be expected, for linolin does not possess the laxative properties of olein, palmitin and stearin.

Next in order of early symptoms, especially among brain workers, are nervousness and insomnia, which are not relieved by rest. Another common early symptom is burning of the hands and sometimes of the face and feet. This occurs after bright weather of summer has begun, but seldom in winter, even in acute attacks of pellagra. There is no other condition in which this peculiar burning of the hands, face and feet is present. Our cases presenting the above symptoms are always linolin consumers, and are, consequently, treated as pellagrins.

It should be borne in mind that the great majority, if not all pellagrins, are suffering with some other disease which may complicate the diagnosis, but by looking for the characteristic symptoms and giving proper significance to the history of linolin consumption, error may be avoided. By making a series of examinations of the stomach of pellagrins and other cotton seed oil consumers who were suffering with gastric disturbances, it was found that all of the pellagrins and many of the other oil consumers gave the ulcer blood spot with Einhorn's thread test. This test was positive with hydrochloric acid present, as well as in an acidity. Ulcer and cancer, in many cases, could be excluded only by observing the progress of the case.

Prophylaxis:—Of course if our views of the etiology of pellagra are correct it is clear that it is to be prevented only by excluding the above mentioned oils and oil mixtures that are used as substitutes for butter and lard. Under this head we may add something in regard to the prevention of acute attacks and so called typhoid pellagra.

Unlike most diseases, pellagra is a condition in which the more slowly the primary cause is eradicated the less the damage is done. Time is required for the removal of

the unstable constituents of the tissues which seem to serve normal function fairly well under some conditions. These conditions appear to be in the nature of influences favoring slow oxidation. This is evident in the beneficial effects of mental and physical rest and in protection from sunshine, and in the evil effects of incidents which call upon the reserve fuel of the body. The pellagrin should be instructed to avoid sunlight if he would be comfortable. Acute exacerbations and typhoid pellagra may be due to overmuch exposure. It is not unusual for a turn for the worse to date from a trip to the hospital or a few hours exposure to strong daylight. Thus some of these manifestations may be an analogy to heat-stroke and sun-stroke. The susceptibility of pellagrous tissue to light rays soon teaches the intelligent afflicted to seek the shade. However, before this lesson is learned, or acting on the advice of the medical attendant, the stroke may fall. Well meaning, yet misguided, friends and relatives sometimes overcome the inclination of the victim to seek the dark.

Another exciting cause of exacerbations is the consumption of fermented oil in unsound corn or oil expressed from unsound seed. Attacks from these exciting causes are non-seasonal, occurring in both cold and warm weather. By respecting these views, the "peculiar exacerbations" by which pellagra is characterized may be avoided, and the complications and sequelæ will be reduced to the minimum.

We will make no effort to give the symptoms here as they are well covered by American literature. (The excellent work of Dr. Marie, translated into English by Drs. Lavinder and Babcock, is commended to the reader).

Treatment:—We have already stated that many attacks of pellagra recover without treatment. Mild, slightly complicated cases scarcely need any treatment, but for the sake of future health all cases should be kept under observation. It is in the serious attacks where nausea, vomiting, and diarrhoea are present that the skill of the physician will be taxed. It is here that we get the most gratifying results. While we are yet continually adding to our armamentarium measures which save apparently hopeless cases we have already acquired knowledge by which the course of the disease may be greatly influenced.

The rapid decline in the death rate bears evidence of effective treatment. From a death rate of one hundred per cent. in 1909 it has fallen to four per cent. in 1911, and no deaths in 1912. This in spite of the fact that a larger number of cases, and consequently an increased number of serious

cases, have been coming with each succeeding year. It is apparent that there is no specific for pellagra in the sense that quinine is a specific for malaria, or antitoxin for diphtheria. All that treatment can hope to accomplish here is to protect the tissues and reduce the sequelæ to the minimum. Mild cases should be given calcium sulphid in the manner detailed below. It is advisable to take a test meal in every case and give such gastro-intestinal remedies as indicated.

The hygienic management should embrace the requirements conducive to good health, such as plain, simple nutritious food, regular hours and sufficient rest. They should all be instructed to keep out of the sunlight and in some cases strong daylight. Where circumstances permit, outdoor exercises should be taken before eight o'clock in the morning and after five in the afternoon on days when the sun is shining. Exercise is always to be moderate, never enough to fatigue. It is not often that mild, uncomplicated cases present themselves for treatment, hence a thorough examination of the vital organs, secretions and excretions should be made. The generative organs in the female should receive careful attention. No deviation from the normal should be overlooked, for these patients are very susceptible to all direct and reflex influences.

For the sake of the stomach, do not overlook the teeth. One exception may be made, which is that until the pellagrous process has been relieved no attempt should be made to correct errors of vision, as these may be transitory.

Dietetic Treatment:—For obvious reasons, all cereals containing much vegetable oil, especially corn, should be interdicted. Starchy food, such as rice and potatoes, are ill borne. The gastric condition forbids fried foods, acids, and concentrated sweets, also fruits, except in limited amounts to convalescent and mild cases. Sweet milk is always a valuable food, and properly administered may be given to all cases throughout the course of the disease. We never fail in our efforts to get the patients to take it. Even those who have always had a distaste for milk soon learn to take it without objection. Next to milk, meats are better borne than any other class of foods, and when no diarrhoea is present should be given at least twice daily, preferably roast and broiled beef, mutton and chicken. When stomatitis renders chewing painful, the meat should be well selected, tender and free from connective tissue, and scraped or ground fine; thus prepared, broiled and fed alone or with a few crackers or toast, it has a marked beneficial effect upon the sore

mouth, without irritating it.

The physician in a pellagrous region will often be confronted with cases presenting the following symptoms. persistent nausea, vomiting, salivation and stomatitis and diarrhoea or constipation. Very feeble heart action may also be present.

This combination of symptoms is always serious, and prompt, cautious action is necessary. Diet here is of first importance, and after experience with a large number of cases, the following directions are insisted upon: When the circulation is good, a glass of sweet milk, to which an ounce of lime water has been added, and two crackers are given every two and one half hours. In some cases when the milk is not retained, or the circulation is weak, solid food, viz., broiled steak or chicken, with crackers or toast, should be given every two and one-half hours.

During the feeding of solid food, water is limited to a glassful, one-half given with the solid food, one-fourth with the medicine before eating and the same amount with the medicine after eating. No ice or ice water is allowed. Special emphasis should be laid on chewing the solid food well, and all inclination to wash the food down should be resisted, though when the saliva is scanty a small amount of water may be taken into the mouth to aid mastication and deglutition. In controlling nausea and vomiting, no agent is as effective as the solid food above indicated, and when milk is not retained it is always resorted to. Often we meet with objection on the part of the patient, but by persistence and promising relief from these distressing symptoms the physician will rarely fail in his efforts.

After nausea and vomiting have been controlled, diarrhoea may persist or start up in those cases who have been suffering with constipation. In such cases the solid food should be replaced by sweet milk. Upon relief of the diarrhoea, meat should be given twice daily. Later on, crackers and toast, then eggs, may be added.

In extending the diet, great care should be exercised to prevent a return of the diarrhoea, and this can best be done by adding one article of food at a time. Upon any indication of a relapse, it should at once be restricted again to milk and gradually added to as before. Fats are to be prohibited except when constipation exists. It is a great mistake to over-feed these patients and try too rapidly to increase their weight or to try to stimulate a poor appetite by active exercise.

The weakness in these patients is often not due to a lack of nourishment, but rather to quality of tissue which can be changed—not rapidly, but very gradually.

Only in mild cases and those suffering with no gastro-intestinal symptoms are buttermilk or fermented milk and fruits allowed. Alcoholic and predigested foods containing alcohol are never allowed in any case. They are never indicated,—always do harm and never do any good.

Drugs in Pellagra.—Perhaps the high death rate in the past could be traced to promiscuous drugging which is, as a rule, in the highest degree detrimental. Unless the proper management is at the same time instituted, experience will soon teach one to distrust drugs in the treatment of pellagra. Perhaps results are due to management and diet rather than to the various remedies which have recently received credit for giving relief. Among the remedies for which claims are now being made are the arsenic derivatives. We have never seen any benefit from arsenic in any form except when combined with iron and given in cases who were anaemic from other causes.

The history of salvarsan should deter its use in pellagra. We know of some serious injuries done by its administration. The use of such remedies can be justified only by ignorance of better methods of treatment.

A great many cases have no doubt been, apparently, benefited by arsenic, together with the proper hygienic, dietetic, and prophylactic measures. This much is conceded, but at the same time there is no doubt in our minds as to the most effective remedies, and some investigations which have been made inform us that others who have adopted the same treatment are getting equally good results. Not only are good results apparent in the progress of the patient by relief of pellagrous symptoms, but these patients feel best when on the remedies outlined below.

All cases are placed upon $\frac{1}{2}$ grain pills of calcium sulphid. This is usually given, three pills before each meal. The number of pills may be increased to as many as twelve (in a capsule) at a dose, but rarely are more than six needed. The physician should always be sure that the patient gets calcium sulphide, i.e., that the pill is soluble and that it has not decomposed, as it is prone to do. We never prescribe a pill containing more than one-sixth of a grain or a tablet, as they are worthless. (We dislike to specify a certain manufacturer's product, but in justice to our patients and ourselves when we write a prescription for calcium sulphid we always specify Abbott's).

In nearly all cases, one of the three prescriptions given below is indicated. When the mucous membranes are involved and there is acid in the gastric secretion up to or above normal, give:

Rx Sodii chloratis..... 3ii
Aque..... f3vi

M. et ft. sol. Sig: Two teaspoonfuls in one-quarter glass of water, one half hour after meals.

In-hypo acidity, give:

Rx Sodii chloratis..... 3ii
Acidi hydrochloric diluti f3ss
Essentiæ pepsinæ.... q.s. f3vi

M. et ft. sol. Sig: Two teaspoonfuls in one quarter glass of water, one-half hour after meals.

This prescription should be taken through a tube, or the mouth rinsed with water in which a pinch of baking soda has been dissolved.

For a lagging appetite, tincture of nuxvomica in doses of ten minims may be added to either of the above prescriptions. One of these prescriptions is given in all cases with gastro-intestinal symptoms. However, there are times when they should be suspended for a day or two in order that more attention may be given to the administration of food and other remedies for nausea and vomiting, which are sometimes the most obstinate of the serious symptoms, and for which all efforts for relief should be instituted.

Rx Pulveris acaciae..... 3ii
Bismuthi subcarbonatis.. 3ii
Calcii carbonatis..... 3i

M. et ft. pulv., No. xii. Sig: One powder in a little water before eating.

Should constipation exist, ten grains of calcined magnesia (light) may be added to the above.

These measures persisted in will relieve the nausea and vomiting, and after forty-eight hours the former treatment should be resumed and continued through the duration of the pellagrous symptoms.

In by far the majority of cases, if not all, the status of the bowels will control the issue. In the serious cases, the intestines, although crippled themselves, are called upon to do the work of the stomach also. Pains may be relieved by hot applications, paregoric, and colon irrigation with a solution of bicarbonate of sodium on alternate days, with warm water to which a drachm of compound tincture of iodine has been added. Proctitis may be relieved by irrigation with the same solutions.

Deficient secretion of bile may play a part in the diarrhoea, and calomel may have to be given daily, a grain, at bedtime. Rarely the diarrhoea persists after the above treatment has been instituted, in which case careful examination of the gastric secretion and feces may reveal some independent disease that is producing it. The usual remedies, opium and astringents, for diarrhoea, have no place in pellagrous diar-

rhoea, and while the movements may be checked in this manner, they will return, and in the meantime mental and nervous symptoms may have developed or have been aggravated. This class of remedies may be of benefit in diarrhoea of non-pellagrous origin.

It is hard to say just what is the cause of pellagrous diarrhoea but it seems to be due to hyperasthesia of the intestinal mucosa together with hypersecretion which in turn may be due to the hyperasthesia.

We have noted the marked exaggeration of the reflexes and the great hyperasthesia of the skin, muscles and nerves in those affected with intractable diarrhoea. This symptom is certainly not beneficial, vicarious, eliminative or of central origin, as has been suggested by Niles, of Atlanta, and Bowling, of Durham. On the other hand, it is the most deadly of all the symptoms. Before we arrived at our present conclusion as to its nature and means of relief, we have seen a number of patients pass out as a result of the drainage incident to the frequent large fluid stools. The associated symptoms consist of dyspnea, rapid small pulse, cold blue extremities and face and frequent fluid movements, always ending in death if not relieved.

Cases suffering with nausea and vomiting who give no history of diarrhoea often develop it when the vomiting ceases. Believing that the diarrhoea is due to hyperasthesia and hypersecretion we came to the conclusion that by slowing up the passage of food and limiting the secretion, and at the same time giving something that would prevent putrefaction and fermentation of the food in the intestinal tract, we could safely control the diarrhoea. An effective remedy is a mixture of bismuth subnitrate and bismuth subsalicylate, equal parts. This is given, a teaspoonful in a glass of warm boiled sweet milk, every two to three hours. When there is fever we take an extra precaution by giving the sulphocarbolates so as to be sure that the milk is protected.

Our efforts here are soon gratified by relief of the diarrhoea, general hyperasthesia and dyspnea. The blood vessels fill up, consequently a slower, stronger pulse. Although there may be no movement for three or four days the fever, when present, returns to normal. After two or three days of constipation a glycerine suppository may be used to obtain a movement. The laxative here should be selected with great care. Enema is ill borne during the first week after the diarrhoea has ceased. The best laxatives to use in the average case of pellagra are castor oil, sulphur and sulphate of magnesia or soda.

Since adopting this plan, we have seen many such patients hitherto regarded as hopeless make a rapid recovery and have lost none.

Some palliative treatment is often needed for the numerous complications which arise, and although these complications may present classical features of an independent disease, it is often the case that they do not yield to recognized treatment for these conditions.

Surgical measures are to be avoided if possible during the pellagrous attack, and especially when an attack is impending. Not infrequently has a serious attack been precipitated by operations for appendicitis, gallstones, ovariectomies and hysterectomies, when the condition was in reality a part of the pellagrous process. However, should the pellagra have been relieved for a few months, the past attack is no bar to an operation. In fact, at this period, these patients appear to recover rapidly from operations.

As no treatment will give the best results without the proper adjunct measures, those that have been found of value will be given in detail.

Skin.—The cutaneous lesions are self-limited, and very little treatment is needed, and it is inadvisable, during the erythematous and inflammatory stages. Protection from sunlight is essential to rapid recovery and to the comfort of the patient.

When the corium is exposed by desquamation and a serous exudate or abrasions predispose to infection, or when crusts need to be softened, apply any bland ointment, as ointment of zinc oxide with ichthyol (five per cent.). Burning and tenderness of the skin of the body and legs sometimes yield to a cold bath, and a rub with powdered salt or lard. Itching and stinging, which is most common in the aged, is best relieved with incandescent light baths. These symptoms may be accompanied by clay colored stools, in which case give 1-34 grain of boldine before meals.

Mouth.—In salivations, as in many other symptoms, too much treatment is usually given. The mouth should be sponged or washed after each feeding with a solution of chlorate of sodium, 1 to 100.

Pellagrous stomatitis is not an ulceration, but is allied to the dermatitis, in that the superficial epithelium is involved. Atropine, 1-150 to 1-200 grain, has been given for the salivation, but its use has been abandoned as unnecessary and inadvisable. It should never be given when mental symptoms are present.

Stomatitis, accompanied by dryness of the mucous membranes, can be alleviated by spraying with liquid alboline and moist-

ening frequently with cinnamon water. Pilocarpine, 1-20 grain, should also be given at bedtime, or twice daily.

Ulcers are rarely seen, and when present should be mopped with nitrate of silver solution, 40 grains to the ounce. A strict dietetic regime is all-important in keeping these distressing symptoms in abeyance.

Stomach.—When the mucous membranes permit, gastric lavage every other day with warm water to which subnitrate of bismuth and bicarbonate of sodium has been added will improve the condition of the organ. Warm milk should be given when pain is present. Pyrosis in these cases is not due to acid in the stomach and yields without other measures than the regular pellagra treatment.

Muscular insufficiency, so common in pellagra, does not often give rise to gastrocystasia, but gastropnoia and dilatation often call for a suitable binder, to make walking patients more comfortable.

Heart.—Due attention should be paid to the circulation. Cardiac weakness is most liable to develop during diarrhoea and vomiting. Nitroglycerine, digitalin, and strychnine should be given, and with this spartaine sulphate and adrenalin, if needed to keep up the force and tension.

Murmurs, related to anaemic murmurs, are sometimes present even in cases with slight pellagra symptoms; they do not add to the gravity of the situation.

Genito-urinary symptoms are often present in the female, and are frequently distressing. Ovarian and uterine pain may demand administration of anodynes and local treatment. Vaginitis and vulvitis can be relieved by douches of the solutions recommended for colon irrigation. For irritation of the external surfaces apply vaseline night and morning, after a bath of cold water. Painful and frequent urination is relieved by a few doses of acetate of potassium and the elixir of saw palmetto.

Insomnia is rare in a properly managed case, the sleeplessness being often the result of some discomfort. As sleep is greatly to be desired, pain should be relieved and hypnotics given. When pain is present, paregoric, a teaspoonful, and five grains of veronal should be administered, and these doses may be repeated in one or two hours, if needed. Veronal in solution is a harmless remedy for producing sleep in these patients.

Typhoid Pellagra.—No attacks of this type have developed in patients after they have been placed on the above treatment, hence limited experience does not warrant an opinion as to the best management.

The bowels, if constipated, are first cleared out with castor oil and feeding in-

stituted as in diarrhoea. Daily enema of normal salt solution or soap solution is given. The temperature is kept within harmless range by sponging, and quinine is given two grains every four hours, preferably the tasteless syrup. The patient is kept absolutely quiet. This management has been successful in all the cases (four in number) that have come to us in 1912.

Psychic Symptoms.—These are not infrequently prominent symptoms. In many cases these manifestations are acute and transient, yet it is probable that every attack of pellagra does more or less irreparable damage to the cerebrospinal system, and to a certain degree this may be true of all the tissues. Should mental and psychic symptoms persist after the relief of the other active symptoms, then the case becomes one of insanity and should be managed accordingly. As yet no marked mental or psychic symptoms have remained in patients who have persisted in the treatment outlined above. This is probably due as much to prophylaxis as to the treatment. By prophylaxis here is meant the protection of the patient from the sun.

For these symptoms no special treatment is given. Our observations lead us to believe that the great majority, if not all, of the psychic symptoms of pellagra are transient; at the same time we can conceive of marked permanent changes in the brain as a result of a long standing central neuritis.

In relieving these symptoms quiet and rest with freedom from worry and company is of the utmost importance. Sleep should be induced by hypnotics, and in acute delirium morphine should be given when necessary. Frequent doses of both hypnotics and morphine are given until sleep is secured.

Due attention to the bowels and kidneys will prevent ill results from them. With sleep and proper mental rest the delirium is finally relieved.

Usually there is immediate improvement upon the administration of calcium sulphide. Hydrotherapeutic measures, when available and selected according to the individual case, are valuable aids. An ice bag to the feet or under the knees, or wet compresses applied to the limbs, are grateful to those suffering with pains in those parts. Extremes of temperature should be avoided during the presence of marked irritation, but good results may be obtained by using these measures after the pellagrous symptoms have subsided. The same may be said of galvanic and faradic electricity. Vibratory and electric massage should be used in cases where there are tenderness along the spine and changes in the cord.

The physician who is conversant with

the principles involved in the therapeutic and physiological application of these measures will recognize their field of usefulness in restoring stability to tissues that have been rendered feeble from any cause. Of great importance is the expressed attitude of the medical attendant in the presence of these patients. Being in general very susceptible to morbid impressions, the pellagrin should have continually impressed upon him the nature of the disease and the possibility of relief. He should also be assured that after twelve months, through treatment and prophylaxis, there will be no return of the disease, although he may experience suggestions, through susceptibility to light influences, of a recurrence.

Rheumatism as a Surgical Disease and its Prevention.

By Dr. D. T. Quigley, North Platte, Neb.

The profession has undergone a considerable change during the last ten years with regard to its views on rheumatism, particularly the cause of rheumatism and therein lies the interest of this paper, for we are very seldom adequately equipped to do much toward the prevention of any disease when we do not understand the cause. Rheumatism has been the cause of many fantastic theories. I do not care to waste any time on these. Everyone who has kept pace with the literature on the subject for the last ten years knows that it is the commonly accepted opinion of the progressive medical world today that rheumatism is an infection.

The bacteriology of the disease is not yet exact but it is probable that there are many different germs that may cause rheumatism and in their function as factors in the etiology of this disease they are usually present in an attenuated form. The micrococcus rheumaticus has been isolated and baptized but it is probable that much rheumatic disease is caused by attenuated forms of streptococci, but some authorities claim the staphylococci may play a part. We know the gonococci may give us the same clinical picture as regards joint pains as the so-called diplococcus rheumaticus, and the process is undoubtedly the same in both cases, the only difference being in the infecting germ.

The Practitioner, published in London, in the issue of January, 1912, gives the entire issue to the subject of rheumatism, and the 20 articles contributed by leading English medical men all favor the germ infection idea as the cause of the disease. The recent literature of other countries is the same, including recently published text books. J. B. Murphy, in a recent lecture

in Paris, referred to the idea of rheumatism being caused by infection as commonly accepted by the medical profession.

How do the infecting germs enter the body? That at all times we are beset with numberless germs is evident by the rapidity with which the body begins to decay and rot when death occurs. The germs we always have with us. The life processes of a healthy animal are sufficient to prevent attack, but there are points of low resistance and these are probably the things of most importance in the etiology of rheumatism. Unfortunately we carry around with us a number of rudimentary organs. These are very likely, when once infected, to carry chronic infection, as rudimentary organs usually get very poor blood supply, are below par in vitality and resistance to infection and consequently are good places for acute infection to begin in and chronic infection to continue in.

A man "catches cold," due to his resistance to infection being lowered by chilling, starvation, alcoholism, or toxemia. His nasal passages, throat and bronchial mucous membrane are infected. He absorbs a certain amount of toxic material from this infected area and has fever, weakness, etc., as a result of this absorption of toxins. "Nothing but a common cold" is likely to be the diagnosis of the doctor, and right here let me digress long enough to say that the common cold is the most dangerous disease known to humanity. This man's system is putting up a fight for his very life and the dire results that may come to him as chronic local infections, that will go on poisoning his blood for years and finally bring him to an untimely end from cardiovascular-renal disease or rheumatic heart or other chronic disease; these things may well make us pause and call on us to give our most respectful attention and highest professional skill to that great destroyer of human life and human efficiency, "the common cold."

As a result of "colds," we have chronic infections of the accessory sinuses of the nose, the tonsils, the pleura, the pericardium, the endocardium and probably the gallbladder, appendix and kidney. A low degree of chronic infection in any of these localities or in any part of the body may cause the disease we call rheumatism. Decaying teeth and pyorrhea may also serve as a point for the absorption of poisonous materials which may produce the disease. A recent writer classes the mucous membrane of the intestines, when in a diseased condition, as a probable important factor in the causation of some cases of rheumatism.

We know that the syphilitic virus travels, localizes and causes rheumatic-like pains.

We know that the gonococcus travels, localizes and causes rheumatic-like pains. We are coming to know that other germs that we have not heretofore suspected in this connection travel, localize and cause rheumatic-like pains. The problem in both the prevention and treatment of rheumatism is the problem of attacking the disease at the fountain head. It is in treatment a surgical problem. Rheumatism has passed from a medical disease to a surgical disease.

In prevention the main thing is the prevention of colds and the keeping of a clean mouth. If colds have occurred and left chronic infection in the nose or sinuses these must be corrected by surgical measures. The tonsils are the main offenders, and in children the infected tonsils are usually associated with adenoids. All adenoids and infected tonsils should be removed before the rheumatic affection starts, if possible. If rheumatism, "growing pains," or the rheumatism of the nervous system and brain known as "St. Vitus Dance," have begun, the trouble can be prevented from growing worse and usually cured by removing the focus of infection, which in children is usually the tonsils and adenoids. If a focus of chronic infection occurs in some other organ, whether it be the Fallopian tube, prostate gland, mastoid bone or other locality, it must be properly treated if the risk of rheumatism is to be avoided. There are many cases of localized infection where there is no apparent rheumatic affection. In these cases the infecting germ is not right, the absorption is limited or the toxic effect is manifested in some other way. In conclusion I would sum the surgical treatment and prevention of rheumatism up in three rules:

1. Keep from "catching cold."
2. Keep your system free from diseased tonsils, or other infecting foci.
3. Keep a clean nose and a clean mouth.

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Cough.*

By M. A. Blanton, M.D., Baileytown, Tenn.

Cough may be defined as a spasmodic, explosive effort of the respiratory organs, and will be considered, in this short paper, only as a very important symptom, and not a diseased entity. However, it sometimes occurs as the only indication of disease, and occasionally when treating this symptom we are treating its cause.

Cough may be caused by extrinsic or intrinsic influences. Under the head of intrinsic causes we might include, in a general way, all the irritations and inflammations of the respiratory tract; remembering that irritation of the lung parenchyma per se does not cause cough, but irritation or inflammation of the pleura does, hence in pulmonary disease, either acute or chronic, the cough is due to bronchial or pleural irritation. Again we should remember never to assume that any cough, no matter how apparently obscure in origin, is reflex or neurotic until we have investigated all other channels thoroughly. It is doubtful,

however, whether a cough ever occurs without a slight form of reflex irritation existing.

The extrinsic or so-called reflex causes for cough are so varied and numerous that we can only mention a few in this article. Arnolds branch of the pneumogastric nerve is responsible for a rare reflex cough connected with irritation of the external auditory canal. Also chilling of the surface, pressure upon the spleen or liver, the various diseases of the liver and gallbladder, especially when associated with involvement of the diaphragmatic pleura. The heart cough, the hysterical cough, dentition cough of infants, the uterine cough, the rectal cough and a number of others that will probably be mentioned in the discussion of this paper. Many coughs in neurotic individuals, especially, are due to excessive irritation of sensitive turbinate areas. An elongated uvula may cause a cough which persists for years, despite all medicinal treatment. I read only a short time ago of a very wealthy and prominent gentleman, who had been bothered with a serious, or at least a persistent, cough for a number of years. After he had spent most of his fortune for various cough drugs, and suffered many things, at the hands of many physicians, his uvula was clipped as an experiment, which told the whole story, his cough stopped and health returned. The so called stomach cough, of which the laity love to speak, must be regarded as a very doubtful phenomenon. It has been my experience to find gross pulmonary lesions where the stomach cough was said to exist. I have no doubt that in the vast majority of such cases there exists some cause for the cough to be found in the respiratory tract. The drunkards and smokers coughs are sometimes called stomach or reflex cough. I think the former due to pharyngitis, the latter to laryngitis.

Cough may be absent in the respiratory troubles of very young children; in cases of profound prostration, the result of severe toxemias; in terminal pneumonias; in the pulmonary complications of drunkards; in a few cases of pleural effusion, and occasionally in incipient phthisis. In this latter condition, even when cough really exists, patients will sometimes deny it, while the relatives give a different story. I have seen patients suffering from this malady admit that occasionally they brought up a certain amount of sputum, and at the same time bitterly deny ever having the slightest cough.

The following are some of the chief points to be noted in regard to cough: Whether hard, soft, barking, brassy or ringing; whether incessant or intermittent;

*Read before the East Tennessee Medical Association at Johnson City, October 10, 1912.

whether occurring in definite paroxysm; whether worse by night or by day, after meals, after exertion, or early in the morning; whether accompanied by secretion, or without secretion; whether accompanied by pain, of which the two most common types are sub sternal tenderness and "stitch" in the side. The former we find in bronchitis, emphysema and asthma; the latter in pleurisy and pneumonia.

Treatment.—First, in all acute inflammatory diseases of the respiratory tract, a good warm bed, in a well ventilated room should be insisted on. This phase of the treatment is too often overlooked in the minor respiratory troubles. First, we shall consider acute bronchitis. In its treatment, after we have placed our patient in a suitable bed in a well ventilated room, we should endeavor to secure adequate expectoration by the simplest means at our command. A mixture of acetate of ammonia, spirit of nitrous ether, wine of ipecac and syrup of tulu is very appropriate at first; to this we might add a little later, if demanded, some oxymel of squill. When the cough is teasing and dry, iodide of ammonium, in two- to four-grain doses, proves effectual in floating off the mucous from the trachea and bronchi. These prescriptions should be incorporated in demulcents, in the majority of cases adding some preparation of opium if needed. Coughs in chronic bronchitis should be treated by first giving iodide of ammonia, if the stomach will tolerate it, to render the secretions from the tubes readily mobile with strychnine which will increase the muscular powers of the chest.

Cough due to laryngeal disease is more appropriately treated locally—inhalations of benzoin vapor, the vapors of menthol, eucalyptol, or the various sprays might be used.

Whooping-cough is restrained by inhalations of the vapors of benzoin, creosote, and other tar products. Belladonna with bromide of soda are most efficient agents. Atropine valerianate, calcium sulphide and iodized lime are well worth a trial.

V cough dependent on chronic hypertrophy of the pharyngeal mucous glands can often be benefited and sometimes cured by a few paintings with iodine-potassium-iodide glycerine solution. Similar applications in chronic rhinitis acts admirably in allaying cough.

The removal of hardened cerumen from the auditory canal has cured many intractable coughs.

We shall not attempt to go further in the detail of treatment and will say, in closing, that there is and can be no routine treatment of cough as a symptom. In each case we must ascertain, if possible, the exact

cause of it, and seek to re establish normal conditions of the affected parts as far as possible.

Vasectomy—From the Eugenic Standpoint; with Report of Cases.*

By Charles V. Carrington, M D., Richmond, Va.

The purpose of this paper is to give to this Society some "food for thought" on a very live subject, namely, how are we of this generation going to prevent the increased, and ever increasing pollution of the human stream—the stream that you and I and all of us are part of—by the hordes of degenerate, feeble-minded, epileptic, insane and confirmed criminals that are multiplying amongst us as the sands of the sea. Statistics are tiresome, and I'm going to avoid them as much as possible.

The time was in our country, and not a long time ago either, when one man in thirty-five hundred was a criminal, an inmate of some penitentiary. Now in our present time one man in every five hundred is caught and graces some penitentiary halls. The insane in Virginia, to bring the matter right home to us, are about in the proportion of one in five hundred, and their proper care and maintenance costs the taxpayers over a million dollars a year. The epileptics in Virginia are so numerous that, very properly, a separate institution has been provided for their care, at Lynchburg, at great and increasing expense. Our State Board of Charities and Corrections have a heart-breaking map of old Virginia, thickly studded with large and small yellow-headed pins, each pin representing a confirmed feeble-minded person, the large pins for the adults, and the small pins for the children, and there are so many more small pins than large ones—in all nearly six thousand.

The time was, not long ago—in fact, in my short span of twenty years—when our penitentiary and jails, all told, could not number one thousand men on the rolls. Now the roll call in all institutions would aggregate about four thousand.

It should not require any argument to a thinking person to convince them that some radical but safe and sane remedy has to be instituted by which this ever increasing pollution and deterioration of the human race could be checked, decreased, and wiped out.

Vasectomy—resection of the vas deferens in the male—or ligation and resection of the fallopian tubes in the female—is the safe, sane, humane and proper remedy.

*Read before the recent meeting of the Medical Society of Virginia, held in Norfolk.

It is too admittedly a fact to bore you with statistics on the subject, that feeble-minded people propagate and have children almost as fast as Belgian Hares. The same is true of the degenerate, insane and criminal classes. The remedy I suggest and advocate in no wise endangers life, is very simple and easy to perform, and is the one sure guarantee that, *that* special breed is stopped. There is nothing inhumane about vasectomy; coition with any and all of its attendant and boosted pleasures is not interfered with. It's a good wager to lay that in any gathering of five hundred men and women a considerable number of them are sterile from mumps and the orchitis incident to the attack, gonorrhoeal orchitis, or pus tubes from infective changes, while more than half of them do not know or realize that they are sterile, and follow along the even tenor of their way, illustrating to the limit, that where ignorance is bliss, it is folly to be wise.

I have had the experience of having the leading medical bodies of this State and adjoining States urge the passage of a properly safe-guarded sterilization bill, and behind and urging the passage of such a bill were the leading alienists and superintendents of our Insane Asylums, answering convincingly every foolish argument against the bill, and the whole effort came to naught, when some ignoramus would rise from his seat in the hall of our Legislature and discourse on "the inalienable rights of a man to reproduce his species," never caring for a moment how vitiated and tainted that special species was, or how much sorrow and suffering, misery and expense, resulted from the propagation of that vicious strain in the human family. Just stop and think for a moment how much crime, horror, misery and sorrow would have been prevented in this world if the first degenerate Jukes sisters had been sterilized. Millions in money would have been saved, numerous murders, innumerable crimes, and untold miseries would have been prevented. The Jukes sisters gave forth their progeny of criminals in arithmetic progression, each one seemingly worse than his predecessor. Their original habitat was New York State. Recently this great State has written into its laws a statute for the sterilization of certain classes. Indiana was the pioneer in sterilization laws. Utah, Iowa, California and New Jersey have followed her lead. In many other States—Texas, North Carolina, Virginia, Maine, Michigan, Wisconsin and Rhode Island—earnest and thinking men and women have come to realize that something must be done along these lines, and proper sterilization laws have been and are now being advocated. I have sterilized

some twenty-odd cases by vasectomy during the last twelve years. A majority of my cases were mental cases, that is, insane patients, all of them consistent masturbators, and more than half of them dangerously homicidal in their tendencies.

I can affirm without hesitation that every single case was benefited by vasectomy—benefited mentally and physically—some of the worse mental cases and most dangerous homicidal ones becoming in time perfectly docile and tractable, and making good reliable nurses, cooks and helpers. Of course, this was a great personal gain for them; but the gain to humanity was in the fact that they could never propagate their species—that special breed was stopped.

I wish first to report three private cases, and then report eleven cases operated on by me at the Virginia penitentiary.

My penitentiary data should be more complete, but, owing to the hostility of the parties now in control of the penitentiary, I have been refused the privilege of copying the data of my work along these lines whilst I was surgeon,—these people going so far as to refuse all data on anything Dr. Carrington had done, when a request was made by the representative of the National Eugenic Record office who came down from New York to review and write up penitentiary cases. The New York doctor thought the action of these people was most remarkable. I told him that I was not surprised, but that in a little over a year from now, under happier conditions, the Eugenic Record office would be able to complete their record of the penitentiary cases.

1st Case.—W., white; neurasthenic, dip somaniac and masturbator.

Vasectomy done October, 1909. Commenced to improve at once physically. Masturbation stopped. Normal coition once or twice a month. Dipsomania helped. Still under observation.

2nd Case.—W. S., colored; degenerate, consistent masturbator; inmate of reformatory.

Vasectomy done June, 1906. Morose, sullen condition greatly benefited. Masturbation voluntarily stopped. General condition greatly improved. Thanked me for "fixing him." I congratulated myself for having stopped that breed.

3rd Case.—B. S.; masturbator; insane.

Vasectomy done 1908. Physical condition greatly improved. Mental condition improved. Masturbation stopped. Still under observation.

The eleven following cases, done some of them ten years ago at the Virginia penitentiary, were all benefited physically and mentally by being vasectomized:

(1) Hi Steele; (2) Richard Mills; (3)

Robert Elliott; (4) Frank Baylor; (5) Mosese Savage; (6) William Bonner; (7) Chris Hays; (8) Morris Scott; (9) Marshall Robinson; (10) William Carter; (11) Joe White.

A complete and statistical report on these cases and others operated on by me at the penitentiary will follow.

932 Park Avenue.

Home Management of the Tubercular.*

By Dr. W. C. Bryant of the Camp Yonah Sanatorium, Atlanta, Georgia.

Gentlemen:—

By way of preface I will ask that you allow me to say that I consider the matter of diagnosis—I mean by this *early diagnosis* of tuberculosis, or consumption, as being of equal importance to the patient as is its subsequent management, and that the success or failure of treatment, whether home or sanatoria, depends largely on this.

With our improved methods of differentiating between pathological phenomena, whereby we can say with a degree of accuracy which has hitherto been almost impossible, there is now no excuse for a physician worthy of the name, allowing any one who has applied to him for treatment, or for counsel, to drift, by reason of ignorance, into a hopeless condition where all help is unavailing.

When the laity, as well as the physician, recognizes the importance of watching with suspicion every attack of so-called "common cold" and lagrippe a long step forward will have been taken in materially reducing the mortality from consumption.

Every indication of declining bodily health, especially in those who may have a predisposition to tubercular diseases, should receive the careful consideration and attention of the family physician.

Slight elevation of the temperature in the afternoon or evening; a sub-normal morning temperature; derangement of the digestive organs resulting in a distaste for food—meats especially; sallow condition of the skin; nervous irritability and the train of symptoms which to some amount to but little in themselves, are often the signs of an approaching storm.

If these friendly warnings are treated lightly or disregarded by the patient or physician a human life is almost certain to drift out among the breakers—another shipwreck is added to the long list; another home is left desolate, and the sad part of all of it is, the whole tragedy could have been averted had the man on the watchtower read rightly the signs and had given proper attention to the signals of distress.

*Paper read before the Ninth District Medical Society.

Let me say right here that tuberculosis, in its incipency, yields as kindly and satisfactorily to proper treatment as do any of the diseases we are called upon to treat and, the sooner both patient and physician recognizes this fact, the better it will be for society generally, for then, and only then, will be overcome that excessive fear and horror of the disease which causes one who has contracted it to refuse to admit to any one—even to themselves—that they have it.

This unreasoning fear on the part of the patient, unless overcome, tends greatly to the defeat of all efforts to restore him to health. Indeed, gentlemen, I had rather undertake the treatment of a moderately advanced case, where the patient accepts his condition in a calm, matter-of-fact way, than to undertake the care of one who is mentally stamped. One is in a mental attitude to bravely and cheerfully co-operate, while the other, although his may be an incipient, favorable case, can not do this and his hope for recovery is lessened in proportion to the fear manifested.

Taking all these things into consideration, I hold it to be the duty of a physician—a duty he cannot in honor evade—to plainly but kindly apprise his patient of his true condition, when he has satisfied himself beyond doubt that his condition is tubercular.

In discharging this duty, however, the intelligent physician—the physician with a soul in him—will use all the tact and diplomacy at his command, to the end that his patient be not unduly frightened on the one hand and on the other that he would have reason to minimize or underestimate his danger.

A physician who undertakes the management of this class of diseases should equip himself, both by study and in other ways, to go to the work he has set himself to do with that confidence in his own ability which will react on his patient and inspire him with confidence. No one relishes the idea of engaging in a hopeless fight, and unless a physician can inspire in his patient that hope which is born of confidence, it is his duty, both to his patient and to himself, to refer the case to some one who can do this.

If the general practitioner is not equipped to properly handle this class of patients it is manifestly unfair to all parties for him to undertake to do so.

The longer I continue in this special line of work the more am I convinced that every one who becomes a victim of this disease should, if possible, place himself for a while, at least, in some reputable sanatoria and there have drilled into him the little details which are so necessary for him to know if

he is to regain his health or avoid infecting others with the disease.

Unfortunately, however, the majority of those who contract the disease are not financially able to do this and this brings us to our subject:

The Home Management of the Tubercular.

The skilled physician, like the skilled commander of a battle ship, will, upon sighting the enemy and realizing that an engagement is inevitable, order his men to "Clear for Action."

With confidence in himself, but not for a moment underestimating the strength of the enemy, the physician will place his "Man o' War" in such order that his soldiers—the leucocytes—shall occupy every strategic point of vantage.

First of all, sanitary conditions will be looked after closely, and if they are not found to be just what they should be this important matter will be attended to at once, for the life of the patient and the lives of others depends largely on this.

If the patient is to remain in the family home, a room with a Southern exposure should be selected for his exclusive occupancy. The first step in the preparation of this room will be to *knock out every window sash in it* in order that every breath of fresh air and every available ray of sunshine may be freely admitted.

All curtains and every stick of furniture not actually needed should be removed, and the walls, if of wood, should be gone over with a fresh coat of paint—some soft tint being preferable. If the walls are of plaster they should be tinted freshly and all wood work washed and painted.

Window shades should be placed over the windows and—to be used only when storming—canvass covered frames (white oil cloth will answer) should be attached to the top of the window frame, on the outside, by strap hinges.

These frames should, of course, fit in to the opening and when thus arranged they may be used as awnings to be adjusted to any desired position by the use of a cord and pulley or by simply propping with a stick.

The floors should be scrubbed clean and a couple of coats of some good floor paint applied, over which a coat of floor wax should be well rubbed in. One or two plain rugs conveniently placed is admissible but carpets—never.

Floors should never be swept nor should the furniture be dusted. Keep the floors clean by mopping with a clean mop moistened with water to which creoline or some good disinfectant has been added. Go over the furniture with a soft cloth wrung out of

the same kind of water.

A comfortable felt or cotton mattress upon an iron bedstead should be used. With one or two pillows, necessary linen and just enough mixed blankets to keep the patient comfortable, the bed is complete.

In very cold weather a hot water bottle placed in the bed is much better than putting on extra blankets.

Sputum cups should be used at all times. Personally, I prefer the "Burnitol" cup, as it costs but a trifle and after use, it, together with its contents, is burned and the chief danger of infection actually eliminated or minimized.

If the cups are not used a plain cuspidor—enameled—and containing some strong germicide, bichloride of mercury, chloride of lime or a strong solution of carbolic acid, should be used.

Having surrounded our patient with sanitary conditions and provided for an abundance of fresh air and sunshine, the next step is to provide him with suitable food.

While in this the matter of individual taste and preference should be consulted, we will make no mistake when we insist on the patient taking within the twelve hours a quart to one-half gallon of fresh sweet milk from a non-tubercular cow. Four to six raw eggs at stated intervals during the day, together with beef, mutton, broiled chicken, butter, vegetables—almost any kind in their season, may be used with our main bill of fare—milk and eggs.

Some recommend that a liberal amount of salt be used on all foods and I am inclined to agree with them, for salt creates a thirst for water which all patients with tuberculosis should drink freely. A broiled salt mackerel, if relished, for breakfast, will serve a good purpose admirably.

If raw eggs are distasteful, a little lemon juice squeezed from a fresh lemon or a dash of sherry over them will usually overcome all objection to them.

The patient should take all the food he can digest—and no more.

He should be weighed at least twice a week and if it is found that he is not increasing in weight satisfactorily, investigation will generally show that there is some form of indigestion responsible for this.

I concur fully in the statement that "Food is our greatest tonic," but if fresh air, sunlight, and a return to the simple life does not cause a desire for food, resort should be made to some tonic preparation that will create a desire for more food.

The Tr. of gentian co. with Nux. and cinchona serves a good purpose here and I have found that the little graule placed on the market by Abbott, of Chicago, containing the arsenates of iron, strychnine and

nuclein, is a most excellent one.

While I consider food, fresh air and sanitary living our greatest allies in combating this disease, I am in no sense a "medical nihilist." Indeed, gentlemen, I think the "nihilist" is more out of place when he undertakes the management of a tubercular patient than anywhere else for, while there is no "specific" for this disease, our materia medica does not offer many drugs, which, if intelligently and skillfully used, will not prove of invaluable service. I will go a step further and say that I know of no calamity that can befall a community greater than for it to become infested with that peculiar pompous variety of ass—the man pretending to be a physician and affecting to have no faith in medicine.

He is a misfit and a misnomer who should not be allowed to run at large.

As to the use of tuberculin, I have had no reason to change the views I expressed at the State Medical Association at Rome last year. While in some cases it may appear to exercise a good effect, I think that the majority who have pinned their faith to it must confess that it is, in the main, disappointing.

The great majority of symptoms met with in those suffering from tubercular diseases are, in my opinion, produced by toxins caused by the presence of the tubercle bacillus and, while there is no medicine that has yet been discovered that will kill the bacilli in the body, clinical experience has convinced me that in creosote we have an agent that will greatly inhibit their growth and, after all is said and done, better results are gained by its use, when properly administered, than is gained by the use of any other drug.

The preparation containing this drug which I use at Camp Yonah Sanatorium, which happened to be R No. 500 and which by common consent is so called by us, makes, in my opinion, the ideal combination.

The formula calls for:

R Creosote (Pure Beechwood)
Turpin Hydrate
Guaiacol, liquid
Calcium Glycerophos.
Sodium, "
Oil Cinamon
Glycerine, chemically pure.

This is given in half to one teaspoonful in hot water before the three principal meals and I have yet to find a stomach so delicate that this mixture is not well borne by it and the results have been so uniformly good that I have adopted it as routine treatment unless there is some well marked contra-indication.

Since I have been using this combination

I have not had so many of the annoying symptoms that are incident to this disease to worry over.

While the best results are obtained in the so-called "curable" cases and those that are designated "moderately advanced favorable," yet I have seen the far advanced and hopeless cases show marked improvement, and in all cases there is a distinct clearing up of distressing symptoms and a feeling of general well-being and hope takes the place of despondency and discomfort.

Should any of you have occasion to try out this combination you will not be disappointed, and in that event, your time will not have been wasted in listening to this hastily prepared paper.

I did not consult my text books in the preparation of this paper for the simple reason that the matter found in the best of them is usually disappointing—lacking in both rhyme and reason.

In conclusion, I will repeat that tuberculosis is the most curable of any of the serious diseases that threaten life, but one must begin proper treatment before the disease has so far advanced that the vitality of the patient is lowered to the extent that there is practically nothing to build on.

When rational treatment is instituted at the right time rapid improvement almost always follows, and were it not for this I would sell, or give away, my sanatorium and again take my place among you as a general practitioner.

I thank you, gentlemen, for your patience and attention.

Deferred Amputation in Destructive Injuries of the Extremities.*

By Drs. D. W. and Ernest S. Bulluck, Wilmington, North Carolina.

Of the host of voices that have proclaimed conservatism in railroad surgery few have told how and to what extent it may be carried out. Nothing can be of greater importance than the determining of the time at which to become radical. In the case of destructive injuries of the extremities it is customary to talk along conservative and act along radical lines.

A consideration of this class of injuries would exclude all minor accidents that did not break the skin and bone and confine itself more especially to those compound injuries of bone, joint and muscle in which amputation is considered advisable by surgeons who are usually deemed conservative. Most typical of this class of injuries are the compound fractures accompanied by more

*Read before the recent meeting of the Atlantic Coast Line Surgeons held in Richmond, Va.

or less injury to the soft tissues. These wounds are already infected and often contain grease, dirt, cinders and other foreign substances with which they came in contact when the injury occurred.

In such instances we would urge a more careful consideration of the extent of the injury, for a relaxed bloody wound may look far less dangerous on the morrow and a shocked weak man, at the time of accident, may show surprising vitality after having been warmed, eased and rested and assured of his welfare.

Bone has little or nothing to do with blood supply, yet if it is broken we are far more liable to amputate. If so much as one third of the circumference of the soft tissue is not badly contused we would advocate, regardless of the immediate condition of patients—except in cases of alcoholism, nephritis, diabetes and old age—that the amputation be deferred until some later time when its indications shall be more unmistakably urgent.

Paleness of the part, absence of pulsation, even breakage of the main arterial trunk are not contra-indications to this course, for at the time of the accident the patient himself is pale and pulseless, at the wrist where pulsations are more easily felt, and the efficiency of the collateral circulation to re-establish a cut off blood supply in the extremities is freely admitted.

When seen at the place of the accident, the patient may be given one thirtieth of a grain of strychnine or one eighth of a grain of spartein sulphate and one-fourth of a grain of morphine, hypodermically, then carefully and immediately removed to the place of treatment.

Upon arrival, the patient will, usually, have partly reacted from the primary shock and be comforted by the morphine.

If a tourniquet has been applied it is removed at once, the wound is exposed and any bleeding points are clamped and tied, with cat-gut, care being taken that the ligature embrace only enough tissue to secure the vessel. The capillary oozing will probably have ceased by this time.

If the wound contains grease, soot, etc., it may be removed with gauze and benzine. After cleansing, the wound is irrigated with a large quantity of warm, normal salt solution followed by a second irrigation containing one teaspoonful of tincture of iodine to the pint of water, the residue of which is swabbed from the bottom of the wound. The external wound should be enlarged in the long axis of the extremity to the full size of the injury beneath and left unsutured, for most of the failures come from the closure of the wound with the introduction of an inadequate drain which serves in

a short time not to drain but to stop up the opening that would otherwise allow the accumulations to escape unassisted. The wound is lightly packed with iodoform gauze, a single splint applied and the whole loosely bandaged. The extremity is elevated, about fifteen degrees, to favor the return circulation and loosely surrounded by a blanket enclosing bottles of hot water to keep the part warm.

No effort is made to approximate or hold the bones together, as such efforts generally destroy much tissue and subsequent nourishment, for when the bones have over-ridden each other some tissue stripping is usually necessary to replace them. The object of this procedure is to prevent amputation, believing that long confinement—and later operation is better than prompt recovery with the loss of a limb.

When the bones are approximated the union is usually delayed or fibrous so that by this procedure much has been staked and little gained. The patient is kept under the influence of morphine and one-thirtieth of a grain of strychnine given hypodermically every three or four hours. Saline purgatives are avoided and large quantities of fluid are given, such as soups and water by mouth and normal salt solution by rectum.

Without moving it, the limb is irrigated with normal salt solution three times a day and the bottles refilled, when necessary, to keep the part warm.

By way of precaution forty centimeters of streptococcus serum and fifteen hundred units of anti-tetanic serum are given when these are available.

The fear of local infection becoming general is one of the most potent factors in the decision to amputate, yet this result is extremely rare and after delaying from twenty-four to forty-eight hours extremely virulent infections may be almost entirely eradicated by amputation at a slightly higher level.

It is doubtful if the mortality is raised by any tendency toward dangerous complications, for this would be counterbalanced by the patient having improved in general condition and more time allowed to prepare for the operation.

It is surprising how long a mortality wounded extremity will survive, before an amputation is required, without affecting the general condition of the patient. In two instances of recent date we have amputated the seventh day after injury, the legs having undergone partial decay while the patients were in excellent condition.

Very high fever or sub-normal temperature, with delirium or actual necrosis of the extremity, should be the only indications to

amputate and those may be prominent two or three days before the amputation and promptly disappear after the removal of the limb.

The tendency has been to greatly underestimate the resources of the body under the conditions described and the above outlined treatment will serve, we believe, to greatly reduce the number of amputations that are now deemed unavoidable, for it matters not how deformed or distorted a cured limb may be it is preferable to the most beautiful stump.

"The Japanese of the Near East."

The most dangerous factor in the present conflict is Bulgaria. The Russian General, Kuropatkin, attending the maneuvers of the Bulgarian army some years ago, by way of being complimentary, remarked that the Bulgarians were the Japanese of the Near East. They have never forgotten that remark. Like the Japanese, they take themselves very seriously, and like them again, they firmly believe that they have a large place on the scroll of destiny. Ever since it declared its complete independence in 1908, Bulgaria has been preparing to fight Turkey. The Turks know this. A Turkish official recently admitted quite frankly to the writer that Turkey had no wish to fight, though not because she was afraid of being defeated. "What good will it do us to fight?" he asked. "We fought and whipped the Greeks, but we lost Crete. We shall fight and whip the Bulgarians, but we will lose Macedonia."—From "The Balkan Union Against Turkey," by E. Alexander Powell, in the American Review of Reviews for November.

Selection of a Tonic.

The greater care and thought being devoted to the use of remedies in disease is heartily to be commended and there can be no question but that the vastly superior therapeutic results that medical men are uniformly obtaining today are the direct outcome of the broader grasp of drug action. Take for instance, the successful application of tonic medication. No physician at the present day would think of administering any potent restorative or reconstructive remedy without paying due consideration to the following essential details:

First. The avoidance of any remedy which from its nature or ingredients would tend to unduly stimulate or excite the higher nerve centers.

Second. The avoidance—except when specifically indicated—of any remedies which suddenly and markedly raise the blood pressure.

Third. The avoidance of reconstructive measures except in rare instances, which do not have a well defined permanence of action, or which must be constantly increased in quantity, or continued indefinitely, in order to secure their beneficial effects.

Fourth. The avoidance of remedies containing drugs which are apt to produce dangerous or toxic effects as a result of some possible idiosyncrasy on the part of the patient.

Careful investigation on the part of the careful practitioner will enable him to see that of all the tonic remedies at his command, Gray's Glycerine Tonic Comp. is one of the few that can be freely employed with certainty that all of the foregoing requirements have been met.

As a matter of fact, clinical experience has clearly demonstrated that one of the strongest features of Gray's Glycerine Tonic Comp. is its practical freedom from any contraindication of age, sex, season or personal idiosyncrasy. It is a thoroughly reliable tonic that accomplishes its effects solely through stimulating the physiologic functions of the body. As a consequence its whole action is to restore a nearer normal balance between physical waste and repair; in other words, the proper nutrition of the whole body. Under its use every function is promoted and helped to do its normal amount of work, with all that this means in the maintenance of physical health and vigor.

After the Baby Comes.

The weakness and debility which usually follow childbirth are all too prone to linger. The burden of lactation is very apt to further prolong convalescence and increase the liability to all manner of complications. In such cases, vigorous tonic treatment is urgently required and the resulting reinforcement of vital processes promptly changes the situation.

Gray's Glycerine Tonic Comp. is peculiarly serviceable as a reconstructive and restorative for the nursing mother, not only because of its notable efficacy in promoting functional activity throughout the body, but especially because of its freedom from all contraindications. Thus it can be freely administered both during pregnancy and thereafter without a fear of its producing any but the most substantial benefits to the offspring as well as to the mother. Few remedies are more effective for increasing the lacteal flow than "Gray's," inasmuch as it exerts its influence through improving the whole bodily nutrition rather than by stimulating a single function at the expense of the rest of the body.

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THE ENIGMA OF LIFE.

During some decades past the general conception, among investigators, of the nature of life has undergone important modifications which may and probably will, eventually, have important bearings upon many subjects including even social and ethical questions.

The subject has been brought prominently to the front by the recent address of the president, Professor Schafer, before the British Association for the Advancement of Science.

The inquiry into the origin and nature of life is by no means a new one. It goes back into the centuries. In later times the names of such men as Lavoisier and Laplace during the eighteenth century, and of Voght, Pettenkofer and others among the more recent investigators are well known as earnest, well prepared and keen observers.

In most recent times we have on the one hand the contributions of Professor Bastian and on the other those of men of whom Professor Loeb may be taken as a representative.

Concerning the work of the former there is a pretty general impression that his conclusions have been drawn from phenomena not too well observed. Indeed some of his supposed new organisms would appear to be by far too advanced in the scale of evolution to be recognized as new products.

The work of the other group carries with it the evidence of far more thorough and painstaking investigation.

It may be extremely doubtful whether all the contingencies which were incident to the original development of organized living beings can be at present or will be in future combined in nature at large so as to present all the conditions necessary to the original constitution of living matter.

Even were living matter to be newly created there is no certainty, perhaps we might say, no probability, that the resulting organisms would follow the general plan of construction or form of the organisms now known to us.

That living matter may originate in the laboratory is far less doubtful. Indeed, so far has the chemistry and physics of organic matter advanced that the physico chemical process by which living substance may be

produced would seem to be almost within sight.

Late investigations have shown that the oxidation of nutrient material induces, under certain circumstances, heat, external to the body as well as within it. Thus far this process of oxidation has not been induced external to the living substance except under circumstances which would be destructive to that substance.

There is necessary to the process an element, the so-called oxidation ferment. The precise nature of this ferment is at present the unknown connecting link between the chemical agents and physical forces on the one hand and the living organism on the other. With the discovery of the real nature of this ferment the hope might well be entertained that the artificial production of living substance could be achieved.

So far as we are now aware then, the one missing link in the theory of artificial production of life is the so called enzyme or ferment which is known only from the hypothetical point of view. Should the exact nature of the assumed catalytic substance be made known there would be no reason to suppose that the artificial production of life would be impossible.

G. T. S.

THE DEVELOPMENT OF THE EGG.

Closely related to the question of the origin of life is that of the development of the egg. The phrase *omnia vivum e vivo* may not be strictly and invariably the law of life, as it could not be were the modern conception of newly organized living beings formed from inorganic matter at the present time a correct one. It is, however, the general experience that all living beings are products of a cell, or egg if we choose to use that term, and from this general and important experience there has, very naturally, arisen the idea that life thus transmitted is the result of a peculiar and very definite force, differing from other forces of nature, and capable of reproduction only under circumstances similar to those with which we have long been familiar.

As the result of the union of two elements, male and female, the female cell, originally single with a single nucleus, (for the yolk, the albumen, etc., are only accessories to the single cell) is subjected to certain changes. In beings above those of the simplest construction the nucleus divides into two nuclei and the cell becomes two cells, then each of the nuclei and each of the cells repeats the process of division until the number becomes as great as the requirements of the future being demand.

With this multiplication of cells in the animal egg there develops the rudiment of

a digestive canal, a nervous cord, a circulating system and such other systems or organs as are to characterize the product of the egg.

Of all this physiologists have long been aware and to the process, together with succeeding processes, has been given the name "vital force" or "vitalism" and more recently, "biotic energy," terms all having substantially the same significance.

But Mead, Hertwig and Morgan observed that the eggs of some animals, such as certain worms, sea urchins and other organisms, might initiate the process of cell division without the assistance of the male element. Experiments resulted in inducing artificial division of the cells of such eggs but the process extended no further.

A dozen years ago Loeb succeeded, not only in inducing division of cells, but in encouraging the process of development still further. The process of artificial fertilization has been advanced until it has reached the very border of complete success. Thus, Bataillon, experimenting with the eggs of frogs, has, by pricking them with a fine needle, induced a parthenogenesis which has proceeded to the production of tadpoles which have been developed to the extent that all of the four legs of the adult frog have been formed and the tadpoles have advanced to the moment of complete metamorphosis. At this point, however, the development has ceased.

Loeb has carried his experiments with sea urchins to a corresponding success, failing only to produce the perfect individual of the adult stage. He has proceeded on the assumption that the action of the spermatozoon is purely physico chemical. He found that two processes were necessary, the destruction of a superficial membrane and the development of a new or fertilizing membrane. By the use of different solutions these processes are accomplished and the development of the egg proceeds until the living larvæ are formed.

Thus we have, at least to a certain extent, a solution of the problem of egg fertilization. There are, however, remaining elements of the problem to be solved which may present greater difficulties. Thus, the transmission of parental characteristics, especially those of paternal origin, would seem to require special elucidation. It is quite possible that the exact chemical composition of the elements transmitted may account for the peculiarities of the offspring.

In whatever manner this question may be finally settled it would seem that the possibility of artificial fertilization of the egg is a step in the direction of a solution of what

constitutes vital force, or to use the modern term, of biotic energy. G. T. S.

OBNOXIOUS MEDICAL ADVERTISING.

Newspaper advertising needs a cleaning up and ought to be easily reached under the Pure Food and Drug Act. This is an age of refined and esthetic advertising in the commercial world, but the vulgar and blatant medical ads. go on in the old way. The "weak men" specialists still ply their trade of catching mail-order suckers, and the tansy pills and other "regulators" are held up to unsophisticated females.

We are all familiar with the questions propounded by the advertising "specialist" and with what importance he attaches to "palpitation of heart," "dizziness," "feelings of impending danger," "indisposition to work," "occasional night losses," etc. One heart specialist carries a page ad. in several of the mail-order papers in which a bewhiskered doctor man is holding aloft a huge, sanguinary heart. A disgusting illustration in the extreme! A lung remedy uses the cut of a naked man with his lungs exposed to public gaze. Another heart cure displays the picture of a man falling on the street giving an imitation of dying of heart disease.

The "before-and-afters" are flaunted before us in which fat ladies have grown slim and slim ladies taken on a pleasing rotundity; the bald heads have grown hair; the homely woman has grown pretty; the sniffing catarrhal brute of a man has gotten cured and become quite a pleasant gentleman; and the centenarian is before us attributing his healthy, green old age to Dopey's whiskey.

This disgusting advertising should be checked. Not that any intelligent person is deceived by it, but because it offends good taste and decency.

THE NATIONAL INSURANCE ACT OF GREAT BRITAIN.

There is much food for thought in this legislation,—legislation conceived in the mind of an unquestionably great man, and accomplished by the energy of a certainly remarkably courageous man. That men shall, during periods of good health, provide for the financial strain of sickness, is all but ideal so far as it goes provided, of course, that the man who has to administer has had proper provision.

We are attempting to commend only what seems to be the principle of the Insurance Act. The London correspondent to the Journal of the American Medical Association, in discussing a letter of Sir Clifford Albutt's in the London Times, says, "If the insurance act is to reduce

sickness in the bulk, the act must do more than bring aid to individuals,—it must create a preventive medicine by promoting researches into the causes of diseases and the means of prevention. His (Allbutt's) fear is that the act will prove an example of our inveterate habit of ignoring causes and throwing all our strength into the mopping up of consequences."

THE OWEN BILL.

The bill that Senator Owen, of Oklahoma, has introduced into our National Senate provides for a centralization of the National Government forces that have to do with affairs of health. This is a beginning in the right direction, it would seem. Men who have ambitions to become members of our National Legislature should be forced to declare themselves on this question before the time of election.

DEEDS AND NOT WORDS.

Eugenics and race betterment have long been considered from an academic, easy-chair point of view, but usually the subject has gone no farther than idle dreams which have never been crystalized into things real. In the meantime we have gone on building more penitentiaries, more almshouses, more insane asylums and eleemosynary institutions generally; while society is encumbered with countless numbers of socially, morally and mentally unfit and partially irresponsible persons who are not cared for by society or the State.

The last few years, and especially during the last few months, eugenics is a subject that has been quickened into real action and one from which we may reasonably expect tangible results in the future at no great distant date. A prominent Chicago minister has only recently refused to perform the marriage ceremony for persons who can not show ample evidence based on medical authority that they possess sound health and absence of communicable disease. Every State will in a few years demand that prospective candidates for matrimony present a clean bill of health. Until very recently no State put any obstruction in the way of the marriage of epileptics, imbeciles, perverts or the otherwise mentally and physically unfit. We are merely beginning to awake to the fact that marriage is not the "holy estate" that we once regarded it with, but that its feet too often rest on the very commonest of clay. If it is the duty of the State to care for the incompetent and unfit, the State should have a voice in regulating the output of such a contingent.

Eight or ten States now sterilize hopeless criminals and degenerates. It is a very benign procedure and not to be classed as

a punishment. Several other States will legalize sterilization this winter.

MEDICAL SOCIOLOGY. A PLEA.

Virchow has placed over the door of his great hospital, "Treat not only the disease, treat also the man."

But in this day of ultra scientific medicine can it be justly said that Virchow's dictum is the rule?

Does any one know of a single medical school which does other than casually mention the "man" in the learned discussion of his disease?

Do the students of our medical schools graduate with even the rudiments of the personal, social, or environmental influences which have so much weight in the causation of the disease he is expected to successfully treat.

We do not hesitate to say that neither Virchow's plea nor the young man's knowledge of the necessity for this plea is observed to any appreciable degree in any of our schools?

At present our clinics present "cases" of pneumonia, anaemia, hysteria, broken down lymph glands, and these are discussed and treated and finally discharged to make room for others. In a few months they return, an eternal repetition, with no thought of "why."

Perhaps by this time some one is asking, "What is the doctor's business if it is not to treat disease?"

Granting that this is his business, what real satisfaction can a physician have in saving the life of an infant from a serious bowel infection, only to turn him over to a mother, ignorant or physically worn out, and an environment of flies, bad air and dirty milk? There is no conservation in this! And furthermore, the lack of appreciation of the sociological reason for this infant's illness will sooner or later cost it its life.

Again, a mother of two children lies dying of tuberculosis, too weak to keep the house clean, too sick to care for the children and the husband clerking in a cigar store, too poor to hire it done. The children begin to cough and are found to be tubercular; the father likewise. The mother finally dies and the children are removed to a hospital for treatment, but what of the father? What, indeed, is the treatment of such as he? Is it drug? It would seem to us that the only rational treatment for such as he would be the broadest sort of medical sociology. A change of vocation; a change of housing conditions; relief from his children until he can be put on his feet again. And all of this under the supervision of the broad minded physician, humanitarian,

sociologist, working with and urging on the organized charities within his community.

But a man or woman does not need to be poor to require sociological treatment. It is a matter of degree, not of kind, and the fully equipped physician will be able to meet it in either case.

But to be thus fully equipped implies some earlier and fundamental training. And this is just the sort of training he is not getting.

So let our ever progressive medical schools heed the cry for a definite course in medical sociology.

GERMS, GOOD AND BAD.

The health and hygiene propaganda is advancing all the time; the schools teach it, the newspapers and magazines are full of it, and everybody now seems to possess a modicum of knowledge of the relation of disease to health. The laity have, however, quite generally acquired erroneous ideas regarding the rather elastic subject of "germs." The lay world should be taught that most germs are good and may serve a useful purpose. About one thousand microorganisms of different kinds have been isolated. Fortunately most of these are not only non-pathogenic but on the other hand perform a useful function in life.

We could not long subsist without bacterial action any more than we could live without insectivora. We must have scavengers for worn-out cells from those of microscopic size on up to the grosser and more tangible refuse of earth. It is wrong for the scientific world to inculcate in the minds of the lay world that the air we breathe is charged with a seething mass of variegated, death-dealing germs.

The opinion goes abroad, supplemented somewhat by the quackish or self-exploiting element of the profession, that diseases are ever multiplying, due to the increase in the number and virulence of microbic life. This is not true; pathological conditions as well as the natural functions of the body are much the same as they have been for thousands of years.

The real enemies of disease germs are good food, pure water, abundant fresh air and sunshine, with a judicious division of work, rest and play. The opposite of these conditions brings disease because it has rendered an invasion by germs possible.

Editorial News Items.

Dr. Southgate Leigh, of Norfolk, Va., President Virginia State Medical Society.

At the recent annual meeting of the Vir-

ginia State Medical Society held in Norfolk Oct. 22-24 Dr. Southgate Leigh of that city was elected President for the ensuing year. In the forty-three years of its useful life this State Society has always shown a degree of refined and critical discrimination in the selection from year to year of the doctor of medicine who should wear its highest honor. The choice of Dr. Leigh well attests the fact that the rule of the past in this respect is still in force, and those who know him well feel very sanguine that the honor could not have rested on more worthy shoulders; an educated cultured gentleman, a learned and wise physician, a popular consultant, a skilled surgeon whose reputation and clientele alike extend far beyond the confines of his native State, he can but reflect upon the Virginia State Medical Society due credit. May a year of success attend on his administration of the affairs of the profession in the Old Dominion.

New Hospital for Winston-Salem, N. C.

Complete plans and specifications for the new city hospital, which is to be erected in East Winston, N. C., are now completed.

The grounds, containing five acres, and the building and equipment will cost \$90,000. Bonds in that sum were recently voted by the city for the erection of a hospital.

The new building will have a capacity for 80 patients, 60 white and 20 colored. It will have 22 private rooms, with four wards for adults and four wards for children.

The building will be of the modern type of architecture constructed of native brick, with tile roof and cement floors. It will be four stories in height, fire-proof throughout and equipped with all modern conveniences.

Book Notices.

Spondylotherapy. Physio-Therapy of the Spine Based on a Study of Clinical Physiology. By Albert Abrams, A.M., M.D., F.R.M.S., Consulting Physician to the Mount Zion and French Hospitals, San Francisco; Formerly Professor of Pathology and Director of the Medical Clinic, Cooper Medical College (Department of Medicine, Deland Stanford Junior University), San Francisco. Third Edition. Enlarged. The Pathology of Spondylotherapy is Founded on Clinical Physiology and its Methods Embrace the Therapeutics of the Reflexes. Philopolis Press, Suite 406, Lincoln Building, San Francisco, California. 1912.

The favorable reception received by the previous editions of this work has induced the author to enlarge the present volume by the addition of seven chapters.

Two years ago, when the first edition of this book was published it was a pioneer effort and only the cognoscenti could correctly interpret its real significance.

The subject of spinal therapeutics has received less attention from the medical profession than it deserves.

This work is divided into eighteen chapters as follows: Historical, Anatomic, Topographic and Physiologic Dates; Symptomatology; Summary of Spinal Diseases and Symptoms; General Spondylotherapy; Pseudo-Visceral Diseases; The Circulatory System; The Respiratory Apparatus; The Digestive System; Miscellaneous Reflexes; The Therapeutics and Diagnosis of Pain; The Reflexes and the Peripheral Symptomatology of Visceral Disease; Torsus of the Vagus and Pharmacology of the Reflexes; Further Advances in the Diagnosis and Treatment of Diseases of the Circulatory System; Further Advances in the Diagnosis of Diseases of the Digestive System; Physiotherapy of Pulmonary Tuberculosis; Treatment of Whooping Cough; Miscellaneous Data.

This volume is substantially bound in cloth, and is in every sense a book worthy of study by the medical profession. It contains 673 pages of reading matter.

Internal Medicine. By David Bovaird, Jr., A.B., M.D., Assistant Professor of Clinical Medicine in the College of Physicians and Surgeons of Columbia University; Associate Visiting Physician of the Presbyterian Hospital, and Visiting Physician of the Seaside Hospital, in the City of New York. With 109 illustrations in the Text and 7 colored Plates. Philadelphia and London: J. B. Lippincott Co. Price \$5.00.

The work is taken up in the following order: Diseases of the Respiratory Tract; Diseases of the Digestive System; Diseases of the Kidneys; Diseases of the Circulatory System; Diseases of the Blood and Ductless Glands; Constitutional Diseases; Intoxications and Miscellaneous Diseases; The Infectious Diseases; Diseases caused by Animal Parasites; Diseases of the Nervous System.

It has seemed to the author of this work, after many years' teaching, that there was a distinct need both among students and practitioners, of a work which should give in compact form the more important facts of the subjects included in the domain of internal medicine.

The arrangement of the subjects has been dictated by the wish to put the simpler first, and to present something of a logical order of study.

This work we would say is quite com-

plete, and will be found of value to the entire medical profession, and most especially to students and professors. The illustrations and binding are most excellent, and show no lack of work on the part of the publishers.

The Story of a Doctor's Telephone—Told by His Wife, Ellen M. Firebaugh, author of "The Physician's Wife." Boston, Mass.: The Roxburgh Publishing Co.

This story is quite fascinating and interesting, and is written in a manner that is sure to hold the readers attention. Any part of the book is a starting point, and every chapter is a complete story.

The book contains 239 pages of reading matter, and is well bound.

A Systematic Treatise on Materia Medica and Therapeutics with Reference to the Most Direct Action of Drugs. By Finley Ellingwood, M.D., Professor of Materia Medica in Bennett Medical College, Chicago, Late Professor of Chemistry in Bennett Medical College; Secretary of the National Eclectic Medical Association; Author of "A Synopsis of Medical Chemistry," "Manual of Urinalysis;" Editor of Chicago Medical Times. With a condensed Consideration of Pharmacy and Pharmacogony, by Prof. John Uri Lloyd, Ph.M., Ph.D., Late President American Pharmaceutical Association; Prof. of Chemistry and Pharmacy in the Eclectic Medical Institute of Cincinnati; Author of "Etidorhpa." Eighth Edition, Thoroughly Revised and Greatly Enlarged. Published by the "Ellingwood's Therapeutist" Publishing Co., 100 State Street, Chicago. 1909.

The previous editions of this book have been so rapidly exhausted, that the author has not felt that there was a demand for a revision of the work until this, the sixth edition.

This work is accepted as a most advanced and authoritative presentation of the therapeutics of the indigenous remedies of our country, and as presenting a new and intensely practical method of drug application.

This work is divided into twelve groups as follows: Agents Acting on the Nervous System; Agents Acting upon the Heart; Agents Acting upon the Respiratory Tract; Agents Acting upon the Stomach; Agents Acting upon the Intestinal Glandular Organs, and upon the Intestinal Canal; Agents Influencing the Character of the Blood; Agents Acting upon the Genito-Urinary Organs; Agents Acting upon the Female Reproductive Organs; Agents Used in the Control of Haemorrhage—Haemostatics; Agents Acting upon Micro organisms and

Parasites; Unclassified Remedies; New Remedies.

This book is substantially bound, and shows no lack of work either on the part of the author or the publishers.

The Practical Medicine Series. Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School, and Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume VI. General Medicine. Edited by Frank Billings, M.S., M.D., Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, and J. H. Salisbury, A.M., M.D., Professor of Medicine, Chicago Clinical School. Series 1912: Chicago: The Year Book Publishers, 180 N. Dearborn St.

This volume gives in a concise and up-to-date manner all the newest ideas in general medicine. It will be found of special value to the busy practitioner who desires information upon any special branch of general medicine. It is small in size, and minor details are purposely left out.

The book is neatly bound, and we take pleasure in recommending it to our readers.

Outlines of General and Surgical Nursing.

By Winnifred Frederick Lindsay, Superintendent of the Training School for Nurses of the Paradise Valley Sanitarium, National City, Cal. Loma Linda, Cal.: The College Press. 1912. Price, \$1.00.

No attempt has been made to present in this little book, an exhaustive series of outlines, but to briefly and concisely give the essentials, thus firmly impressing the main principles or skeleton, as it were, of the various subjects.

Does it tell me how?

Does it give methods in brief, concise terms?

These are the questions the nurse asks regarding a text on nursing and by which she judges of its usefulness.

The methods outlined in this book have been in use and have been taught student nurses by the author for the last ten years. All the various procedures and methods used in medical and surgical nursing are given in a full, complete, and yet concise manner. The third part, on the "Preparation of Solutions," is pre-eminently the work of a teacher, and will commend itself to both the student nurse and the training-school teacher.

The book contains 114 pages of text

matter on superior paper, interleaved with ruled ink note paper.

Muscle Spasm and Degeneration in Intrathoracic Inflammations and Light Touch Palpation. By Francis Marion Pottenger, A.M., M.D., LL.D., Medical Director of the Pottenger Sanatorium for Diseases of the Lungs and Throat, Monrovia, Calif. Sixteen illustrations. St. Louis: C. V. Mosby Co. 1912. Price, \$2.00.

The observations and practical suggestions recorded in this volume are based on several thousand physical examinations.

Should the practical suggestions herein made fail to furnish the aid in clinical diagnosis for which the author hopes, he still believes that the theoretical considerations presented may be of value to the profession.

The volume contains chapters on the following subjects: Spasms and Degeneration of the Muscles of the Neck and Thorax in the Presence of Intrathoracic Inflammations; Causes of Muscle Spasm and Degeneration; What Can be Determined by Noting the Condition of the Neck and Chest Muscles in Acute and Chronic Inflammations of the Lungs and Pleura; Effect of Muscle Spasm and Degeneration; Cause of Lagging as a Sign of Apical Involvement; Cause of Flattening of the Chest Wall on the Affected Side; The Relation of the Muscle Change to the Anomalies of the Upper Aperture of the Thorax; Neck, Chest, and Shoulder Pains of Reflex Origin; The Effect of Muscle Change upon Percussion Findings in the Physical Examination of the Chest; The Effect of Muscle Change upon the Data Derived from Auscultation; Light Touch Palpation.

The book is attractively bound and the illustrations are unusually good.

A Satisfying Magazine.

Lippincott's for November is rich in fiction, long and short; and there is also some seasonable matter that is easy to read and worth remembering. The most important of the varied and diverting contents is of course the novel-entire—a type of fiction which has long been a feature of this publication. This novel is a racy, entertaining detective story entitled "The White Alley," by Carolyn Wells, whose previous novels along these lines—"A Chain of Evidence," "The Clue," and "The Gold Bag"—have had a tremendous sale in book form. "The White Alley" is like all other detective stories in that it has a mystery, but the mystery itself is unlike any other of which we have ever heard. The plot hinges on a battle of wits between a brainy detective and a clever criminal. From the time the wealthy owner of "White Birches" dis-

appears, till the entirely unlooked-for denouement, when the villain is confounded by means of a tiny clue in the shape of a boy's marble, the action is tense and the interest sustained. The grimness of the story is relieved by a charming love interest and many adroit touches of humor, such as one has learned to expect from Miss Wells.

Next to the novel in point of interest is perhaps John Fleming Wilson's astounding paper called "Panama, City of Madmen." In it he points out that the Canal is costing us not only a vast sum of money, but also something far more valuable—the mental balance of thousands of stalwart Americans. "The Little Land Movement," by Forbes Lindsay, has to do with profitable farming on a small scale, which promises to revolutionize the farming industry. Edward Sherwood Mead's financial article this month is called "The Public Service Corporation and the City." Other articles in the issue are "The Passing of the Boss," by Ellis O. Jones; "Science and the Theatre," by Robert Grau; "Table-Tourists," by Helen Coale Crew; and "The Selfishness of Celebrities," by Thomas L. Masson.

The heedfully-chosen short-stories make a captivating group. They are "Adventures of a Recluse," by Eleanor Mercein Kelly; "The Gratitude of Johnny Flynn," by Lowell Edwin Hardy; "Flood-Bound," by Clinton Dangerfield; "The Defalcation of Mrs. Mitt," by Elizabeth Maury Coombs; and "The Tale of a Political Spoil," by J. Sanford Rickards.

There are poems by Witter Bynner, Arthur Wallace Peach, Charles Hanson Towne, James B. Kenyon, W. B. Ridsdale, and Mary Byerley, and some bright epigrams by Warwick James Price. "Walnuts and Wine," the humorous department, offers a generous assortment of jokes, jingles, and anecdotes. "Twentieth Century Travel," the automobile department, is ably conducted by Churchill Williams, while "Investments," the financial department, is in charge of Edward Sherwood Mead, Ph.D. Taken all in all, the November Lippincott's is a big, satisfying magazine.

ent author has shown that it is the globulin fraction of the urine which gives the reaction. It may be that the serum globulins which give the Wassermann reaction of the serum pass over into the urine in such quantities as to give the reaction, or the urine reaction may be the result of localization of spirochaetes in the kidney. He has examined a large number of cases of kidney disease during the last two years in order to discover with the help of the new serum reaction whether many cases of nephritis of unknown origin might prove to be cases of syphilis of the kidney. During the whole time, however, the Dr. has discovered only three instances in which clinically and serologically this proved to be the case. In two of these cases there was no known cause for the albuminuria, in the third an attack of scarlet fever twenty-four years earlier was considered to be the cause. Syphilis was denied in the first case, but not in the other two. Anti-syphilitic treatment gave a splendid result in the first two cases, but gave none in the third, which was a severe one with general edema. In all three cases the urine, which was large in amount, contained much albumen up to 20 per cent., 25 per cent. and 40 per cent., respectively, while the sediment was comparatively small, and there was absence of general symptoms, such as cardiac hypertrophy, increase in blood pressure, thickening of vessels, and of uremic symptoms, even in the stage of general dropsy, so that the condition suggested amyloid kidney disease. In the first two the amyloid disease was limited to the kidneys, in the third there was general visceral amyloid disease. He is of opinion that symptoms of isolated amyloid disease of the kidneys should arouse suspicion of a syphilitic affection. Both the blood serum and the urine in all three instances gave a markedly positive Wassermann reaction, and it was therefore impossible to draw from the cases any conclusion as to whether the kidney condition was due to syphilitic toxins or to spirochaetes in the kidneys themselves. From the author's experience it would appear that syphilis seldom attacks the kidneys.

Abstracts of the Leading articles of the month.

Syphilitic Diseases of the Kidney and Wassermann Reaction.—Bauer (Wien. klin. Woch.) discusses the clinical and serological diagnosis of syphilitic diseases of the kidney. It has been known for some time that the urine in a syphilitic patient with high grade albuminuria may give a positive Wassermann reaction. The pres-

Hexamethylenamin.—Hald, in the International Clinics, treats of the use of hexamethylenamin in aural surgery. In April, 1909, Crowe published his researches on the excretion of hexamethylenamin in the cerebrospinal fluid, and stated that after therapeutic doses it regularly appears in the liquor cerebrospinalis where it may produce an inhibiting effect on the growth of microorganisms. Among later investigators, Rowell, Brem and Ibrahim have published observations believed to show a beneficial

action of the drug in meningitis, but these observations Hald believes to be not very conclusive. He has observed at least two cases, without meningeal symptoms before the operation, develop a fatal meningitis subsequent to incisions of the dura mater, although hexamethylenamin was administered immediately after the operation. He regrets that he cannot express himself with the optimism of Crowe as to the prophylactic value of the drug in meningitis, although he does not go so far as to deny that it possesses such a value. According to his experience one is justified in considering the drug as one which may with some probability be expected to prove helpful in some cases of otogenic meningeal complications, although it will certainly turn out unsuccessful in the majority of cases. Still he believes that a trial of it is indicated. It is to be given in doses of 16 grains four times a day to adults, correspondingly smaller doses to children for a few days at the utmost; the urine must be examined for albumin every day during its administration. As a prophylactic it ought to be given some hours before the operation in question. If the patient is suffering from vomiting or cannot be made to swallow, the drug may be safely injected subcutaneously in the same doses, the solution being one of 7 per cent. strength. Subcutaneous injection ensures a stronger concentration of the drug in the cerebrospinal fluid than when given by the mouth and should therefore be preferred in cases of manifest meningitis.

Treatment of Gonorrheal Conjunctivitis.—Goldzieher (Wien. klin. Woch.) points out how unsatisfactory are the results of the customary treatment of severe acute gonorrheal conjunctivitis. The Dr. has made trial in fifteen cases of a method of treatment which consists in applying moist heat locally. The writer bases this treatment upon two facts: The first is that the gonococcus is almost always found on the surface of the conjunctiva attacked or in the superficial cells, and only exceptionally is found in very small numbers in the subepithelial tissue. The second is that the gonococcus bears higher temperatures badly, is destroyed in ten minutes at a temperature of 44°C . (111°F .) and immediately at 45°C . (113°F .) The author has therefore devised an instrument which is convenient and portable, and by which a spray of steam can be directed towards the conjunctiva, from such a distance as to give a temperature of from about 45°C . to 52°C . (125°F .) at the conjunctival surface. At first, before using an instrument by which the stream could be regulated, the process was so painful that it was not adequately

carried out. Even with the apparatus the first applications are painful, but later ones are found to give hardly any inconvenience. If the lid is too much swollen to be everted ice is applied in the customary way until this becomes possible. When complete excision is still not possible the steam is applied at the higher limits of temperature. If there is much chemosis the ocular conjunctivitis is also treated. The author has had the most satisfactory results from the treatment, which was only given in very severe cases. The fifteen cases treated were in two groups, according to whether the cornea was or was not already involved when treatment was begun. In the ten cases in which the cornea was untouched recovery was quick and complete. The lids promptly became less swollen, so that complete eversion became possible, chemosis lessened, and the discharge by about the fourth day had come down to a minimum. The cornea in all cases remained free. In five cases there were already corneal defects when the treatment was begun. In one case with purulent inflammation of the cornea full recovery was obtained. In two in which there was almost complete infiltration a moderate degree of vision was saved with the help also of operative treatment. In the remaining two cases in which the cornea was already destroyed the application did, at any rate, quickly cause cessation of the purulent secretion. An after treatment of the conjunctiva may be needed if the secretion, although free from gonococci and non-purulent, still persists. After treatment with silver nitrate solution is seldom needed. The author has no doubt of the immense value of the treatment as compared with the customary silver nitrate method.

The Relation of Chorea to Rheumatism. Analysis of Three Hundred Cases.—Fraser (The London Practitioner) divides it into three sections:

First. The influence of rheumatism in the production of chorea; second, the influence of a neuropathic tendency; third, the pan-rheumatic origin of chorea.

Under the first head he notes the occurrence of rheumatism before an attack of chorea. Definite evidence was found in 50 per cent. Cases with a history of sore throat were not included.

Second. Its occurrence during an attack of chorea. This subdivision gave 8 per cent.; of these 3 per cent. had no history of a previous attack of rheumatism.

Third. The large percentage of organic cardiac affections in chorea. He considers a double mitral murmur as fair evidence of rheumatic endocarditis and finds 3 per cent. having this condition had no other evidence

of rheumatism previously to or concurrently with the attack of chorea. If systolic apical bruits alone can be taken as evidence of rheumatism the percentage is 18 per cent.

Fourth. The occurrence of rheumatism after an attack of chorea. Here it was found that at least 25 per cent. of those who at the time showed no evidence of rheumatism developed it within six years.

Fifth. The family history of rheumatism and chorea in patients suffering from chorea. In this, which is open to error, 72 per cent. of all cases had either a personal or strong family history of rheumatism, or if cardiac systolic mitral murmurs be taken as evidence of rheumatism, 90 per cent. had either personal or strong family history.

Sixth. The correspondence between the age and seasonal incidence of rheumatism and chorea respectively. A comparison of tables which he gives shows that both chorea and rheumatism are rare under five years of age with a marked increase of chorea between six and twelve years and in rheumatism between the age of seven and twelve years. As to the seasonal incidence by far the largest proportion of cases was admitted in the months of November, December and January.

This is unimportant as shown by (1) incidence, (2) neuropathic family history, (3) the occurrence of fright and other emotional disturbances preceding the onset of chorea.

Sex incidence shows females 73 per cent., males 27 per cent. neuropathic family history. In a large number there was a history but the evidence was insufficient to make it possible to tabulate any accurate statistics. Occurrences of fright or emotional disturbances, there was a definite history in 12 per cent.

The Use of Digipuratum in Heart Disease.—Newburgh and Marks (Archives of Internal Medicine) emphasize the uncertainty in action, and the great variation in strength, of the ordinary preparations of digitalis and strophanthus, quoting the studies of Fraenkel and of Buchner as proof of such.

Further, the tendency of the leaf preparations to produce in many patients gastroenteric disturbances often renders digitalis medication difficult. This untoward effect is attributed, in part, if not wholly, to the presence in the leaves of digitonin, a substance pharmacologically a saponin.

Gottlieb has succeeded in obtaining a product free from digitonin and from 85 per cent. of the other bulky and inactive matter which ordinarily passes into a leaf-extract, but retaining practically all the digitalin and digitonin contained in the crude leaves.

To this purified product Gottlieb gave the name of digitalis depuratum, or digipuratum for short. This purified digitalis extract is a yellow liquid, the active principles of which are insoluble in cold water and acids, but easily soluble in dilute alkalis, thus insuring their ready absorption from the intestines. The yellow fluid is standardized physiologically and is then taken up with sugar of milk to form a powder. The powder obtained is further diluted with sugar of milk until the resulting product has a definite and constant pharmacologic strength. For convenience of dosage digipuratum is usually dispensed in tablet form, each tablet containing 0.1 gm. of the powder.

The very favorable results obtained with digipuratum by Hoepfner, Mueller, Tissot, Clemens, and others encouraged the authors to try the preparation in the medical service of the Massachusetts General Hospital.

In the course of a little over a year more than 180 cases of primary heart disease or secondary cardiac involvement had been treated with digipuratum. The effect on the urinary output was very prompt in most instances. Not a single case of vomiting or diarrhea occurred; in fact, the vomiting of a number of cardiac patients at entrance was promptly stopped by digipuratum. Cumulative poisoning was never observed.

Eight cases taken from the first fifteen of heart diseases treated with digipuratum are briefly reported. A chart accompanies each case, all showing graphically the prompt diuresis and slowing of pulse-rate which followed the use of digipuratum.

The preparation was given, as a rule, in treatments of twelve tablets in four days; four tablets the first day, three the second, three the third, and two the fourth day. In the more serious cases the drug was continued in doses of one or two tablets for a longer or shorter period. In one patient, a boy of 16, 106 tablets were given in six weeks with at no time any suggestion of digitalis poisoning.

Soaps and Their Effects on the Skin: An Analytical Research.—Gardiner (Edinburgh Medical Journal) concludes an article as follows:

1. All soaps, from their chemical constitution, must be irritant to the normal skin.

2. The effect varies with the individual skin, and is more pronounced in senile and diseased skins.

3. Cottonseed oil and rancid fats are probably largely responsible for the irritant effects in cheaper soaps. They are much more commonly used now than in former years. Gardiner is of the opinion that the first mentioned is, uncombined, a skin irri-

tant, but this is a matter for further inquiry.

4. The bactericidal power of soaps is nil, and even when combined with antiseptics they are of no value as germicides.

5. There may be some reason for the introduction of such substances as sulphur and ichthyol into soaps because of their effects on the glands and blood vessels of the skin, but clinically, antiseptics, and above all carbolic acid, increase irritation.

6. There is no scientific basis for the addition of extra fat to soaps, as when soap is mixed with water the alkali freed will at once unite with the superfluous fat.

7. Rosin and impurities have no significance from the present standpoint, but paraffin and benzene derivatives, when incorporated with soaps for cleansing purposes, increase the harmful effect on the skin.

8. The minimum of soap should be employed, and well washed off.

The Salvarsan Treatment of Pernicious Anemia.—Bramwell (British Medical Journal) says that in March, 1911, he published two cases of pernicious anemia in which great improvement resulted from the administration of salvarsan. In this paper he proposes to record the future progress of these cases—they have remained well without any further treatment—and the results in five other cases treated in the same way. Since he commenced to treat cases of pernicious anemia with arsenic in the year 1875 he has had a large experience with the disease; the impression which has been made upon his mind by the results of the salvarsan treatment in the seven cases which he now records is, on the whole, very favorable. If his observations are confirmed by further experience, and by other observers, he is disposed to think that salvarsan will probably be found to be a more efficient remedy than arsenic given by the mouth, and indeed more efficient than any form of treatment which has as yet been employed in this very grave and intractable disease.

Treatment of Cholelithiasis.—Mayer, in The London Lancet, says that (1) acute cholecystitis should be treated medically; only the most severe form, cholecystitis acutissima, belongs to the surgeon; (2) chronic relapsing cholecystitis should be treated by operation only when all the suitably employed agencies of medical therapy have failed; (3) operation should be performed in chronic obstruction of the ductus choledochus if two or three months of medical treatment are without effect. In cases with prolonged remittent fever, rigors, and bad general condition the operation is unquestionably indicated; (4) hydrops vesicæ felleæ demands operation only if there are

persistent and very severe irritative phenomena; (5) empyema of the gall bladder and all suppurating processes in the region of the gall bladder and in the liver should be operated upon; (6) adhesions about the gall bladder should be treated medically as long as the inconvenience produced is not marked. In the most severe cases operation is required; (7) acute and chronic pancreatitis resulting from cholelithiasis belong to the surgeon. He recommended for the treatment of cholelithiasis salicylic acid only. Salicylate of soda with extract of belladonna are often found valuable in practice. The chief influence of salicylic acid is upon the inflammatory symptoms. He has seen the best results with salicylic acid in acute and chronic cholecystitis, especially with simultaneous rest in bed and the application of hot compresses. In such cases he gives from two to four times a day a powder of sodium salicylate 0.5 gram, and extract belladonna 0.01-0.02 gram, dissolved in warm water. The Dr. has used calomel for years according to the recommendation of Sacharjin in severe cases of biliary colic accompanied by constant pain and high fever. The writer gives 0.06 gram every hour for the first three to five doses, according to the nature of the case, and afterwards every two hours until the first typical calomel stool appears. Striking results are frequently obtained by this treatment, since the pains often cease at once, the fever gradually diminishes, and the whole severe symptom complex completely disappears in a few days. The bile can be made more liquid by giving the patient an abundance of fluid. Excesses in eating must be avoided. All food difficult of digestion must be strictly forbidden. Food should be taken minced or in the form of puree. The patient should be kept in bed for several days after each attack of biliary colic, and in severe cases as long as there are inflammatory manifestations and as long as tenderness on pressure over the gall-bladder remains. In the absence of these symptoms physical excesses are not only indicated, but constitute one of the most important factors in treatment. Deepbreathing exercises are valuable.

Increased Subclavicular Expansion in Pleural Effusion in Children.—Weill and Gardere (Lyon Med.) comparing their clinical observations with radioscapy, state that in pneumonia there is invariably a marked diminution of subclavicular inspiratory expansion. They have at times noticed the absence of this symptom during the course of affections which clinically resemble pneumonia. For example a child admitted with high temperature, dyspnoea

without cyanosis or recession had slight dulness, tubular breathing; a few rales at one base; the subclavicular expansion, however, was not diminished, but rather increased. Radioscopy shows that such cases were really pleural effusions. Recently a child was admitted with similar symptoms and labial herpes, the right base was dull, there was tubular breathing and rales, the expansion of the right subclavicular region was increased. Radioscopy showed the right lung clear at its upper part; the lower part, on the contrary, was the seat of a marked shadow reaching as far as the diaphragm and stretching laterally as far as the costal border. The characteristic triangle of pneumonia was absent. Exploratory puncture drew off fibrino-purulent fluid. The child presented all the general signs of pneumococcal infection, but instead of the lung the pleura was affected. These facts show the necessity of carefully examining the subclavicular expansion in children with signs of an acute pulmonary affection. The clinical diagnosis between pleurisy and pneumonia is sometimes difficult; percussion is much more delicate in the child, and an abundant effusion is necessary to produce decided dulness. Moreover, breath sounds may be heard in a child in spite of the presence of fluid, and rales are almost always heard in the course of a pleurisy of moderate amount. The presence of increased subclavicular inspiratory expansion constitutes a valuable sign in favor of the existence of a pleural effusion. Diminution of this expansion is invariable during the course of pneumonia in children, and whenever it is absent it should throw doubt on the diagnosis of pneumonia and suggest the presence of pleural effusion.

Pregnancy and Labor in Tabes Dorsalis.—Jakub (Zentralblatt für Gynäk.) gives details of such a case. The patient aged 36; contracted syphilis 16 years previously, shortly after marriage. One child survived of four born alive. The tabes had slowly progressed for seven years, with absence of sexual desire and feeling on coitus, and no sensation on evacuating the bladder. During labor there were no pains, though the uterine contractions could be distinctly felt. Shortly before the head was born there was a feeling of pressure on the rectum. The placenta was delivered spontaneously ten minutes after childbirth, with no subsequent haemorrhage. There were no pains throughout the whole course of labor. A normal puerperium followed, and the uterus involuted well. The child, a healthy female, weighing 7 lb., took the breast well. There was no evidence of syphilis in the child, but there was a posi-

tive Wassermann in the case of the mother.

Tuberculosis of the Mesenteric Glands in Children; Its Nature and Treatment.

—Corner, in *The London Lancet*, says that in practically every child patient submitted to an abdominal operation there will be found evidence of tuberculous mesenteric glands. The Dr. maintains that owing to the difference in muscular structure of the small and large intestines there occurs in the ileo-cæcal region a stagnation of the intestinal contents. This pause takes place in a warm, slightly alkaline medium, which is an excellent place for the multiplication of various micro-organisms. To protect the body against this menace a large amount of lymphoid tissue has been formed in the ileo-cæcal region. Hence the function of the appendix. There must be a continuous "ileo-cæcal" strife between organisms and the lymphoid tissue. And so long as the lymphoid tissue prevails the host is in good health. If the micro organisms get the best of the ileo-cæcal strife the host is in bad health, and may suffer from appendicitis, colitis, or infected glands in the mesentery. From the above it is argued that the great entrance of tuberculosis from the intestine to the body is by the lymphatics, in the ileo-cæcal region. In the treatment of these cases the author advises removal of the appendix followed by a course of treatment for tuberculosis on generally recognized lines.

Dysmenorrhœa: Haematometra of One Horn of Uterus Bicornis.—Macleay (Jour. Obst. and Gyn. Brit. Emp.) records this case as an unusual cause of severe dysmenorrhœa. A single woman, aged 20, had menstruated regularly since the age of 12; menses scanty with severe left-sided pelvic pain, and sometimes troublesome diarrhœa. Median laparotomy showed a uterus semi-duplex, in which the cavity of the right cornu was continuous with the single cervix and single vagina, while the left and rather larger horn was not so connected with the lower part of the genital tract. This left horn was densely adherent to intestines, omentum and bladder. After amputation of this horn it was found to contain two drachms of chocolate-colored fluid under great tension. The fluid presented the usual characters of that commonly associated with retained menses, and the containing cavity was lined by a mucosa. The wall of the cornu was dense and fibroid, and this character doubtless accounted for the exaggerated menstrual pain, and for the comparatively small quantity of fluid which had accumulated. The patient made a good recovery, and was completely cured of her dysmenorrhœa.

Cardiac Problems.—Griffith, in the British Medical Journal, gives an excellent and clear review of the established facts regarding their diagnostic significance. He says that he knows of no observations which show that the postsphygmic period of the tracings varies in length in animals of different species or in man under physiological conditions, or whether it is lengthened in cardiac hypertrophy, or shortened when the heart is dilated or the subject of toxemias. Tracings which he obtained in two cases of myotonia congenita, in which the voluntary muscles relax very slowly after contraction, showed that there was also a similar slow relaxation of the ventricular musculature. The apex of the venous ventricular wave was distinctly later than the bottom of the aortic notch in the pulse tracing. From a case of adherent pericardium he was apparently able to confirm the suggestions of others to the effect that the ventricular muscle around the conus arteriosus relaxes later than the remainder of the ventricle. This would seem to bear out the contention that there is a sphincteric support for the aortic valves. He has some confirmation of the explanation given by Gibson for the origin of the "h" wave in the venous pulse, as being due to the rapid rush of blood into the relaxed ventricle and a transitory preliminary closure of the tricuspid valve from this cause. He could distinctly hear this closure simultaneously with the appearance of the "h" wave, and, in the same patient, it was absent when the wave was wanting. Griffith further adduces a certain amount of valuable evidence to show that in some cases of extrasystole when the following auricular contraction fails to provoke a ventricular response, the failure is due to lack of transmission through the bundle of His rather than to a refractory state of the ventricular muscle. He suggests that when the irregular period in the presence of extrasystoles is less than two ordinary spaces the extrasystole is probably of auricular origin. The converse of this proposition is, however, not true. For the certain diagnosis of complete heart block he holds that the action of the ventricle should be less than forty beats a minute; that the ventricular rhythm should be regular, but if it is irregular, as occasionally happens, the ventricular systole which appears next after the premature beat will be found to be separated from it by the same interval of time as are the regular beats, this being due to the fact that the rate of formation of contraction material in the ventricle is of uniform duration; and finally, that there should be no strict relationship existing between the auricular and ventricular systoles. In the case of auricular fibrillation, Griffith empha-

sizes the sharp distinction which must be made between the true auriculosystolic bruit and the ordinary presystolic one. The latter may be present but the former never is. He reports some cases in which the interesting phenomenon of coupled beats has been observed in fibrillation, in the absence of digitalis medication.

Two Cases of Pneumococcal Vulvovaginitis in Children.—Chapple, in The London Lancet, says that vulvo-vaginitis in children should be classified under two headings—specific and simple. The former group includes those cases that are due to a specific organism—the gonococcus. All other cases are grouped in a heterogeneous mass under the so-called simple group.

I wish to consider the mass included in the "simple group": first, in order to show that such an inadequate grouping of cases, that are in reality widely dissimilar, is very apt to give an erroneous idea as to prognosis and treatment in any particular instance; and secondly, that the prognosis and treatment in this group, as, indeed, they are in any case of vaginal discharge, are materially influenced by an accurate knowledge of the micro-organisms present.

In deciding upon a treatment in any individual instance in the group under consideration, one must be aware of the fact that in a certain number there is present an associated local lesion, such as eczema of the vulva, etc., but in the majority there is no such lesion, and the inoculation must be regarded as accidental.

In conducting a bacteriological examination of the discharge it should be remembered that certain organisms appear to be the normal inhabitants of the vagina. On the other hand, others are not to be regarded as such; and although our knowledge is not yet complete, as in a direct smear one encounters organisms that do not appear on the culture media and with whose exact nature we are not at present conversant, nevertheless information of the greatest value is obtainable. Certain vaginal discharges are of much graver import than others. There is no question that the female genital tract is cleared with much greater difficulty of certain organisms, and their presence is of much more vital importance to the individual than others.

From the results of the investigation of some cases of this kind I have selected two which I am recording as affording excellent examples of these points.

Case I.—A girl, aged 13, had had scarlet fever last summer. Otherwise she had been quite well. She had noticed a discharge for three days, but was unable to account for its onset. She did not feel ill. The discharge was yellowish, but not offensive.

There had been no trouble with micturition. Menstruation had not commenced.

Case 2.—A girl, aged 11, had been in hospital in October, 1910, with an indefinite attack of pain in the gluteal region, associated with abdominal pain, passage of mucus and diarrhoea, which had rapidly yielded to treatment. Three days previous to her second visit to the hospital in 1912 there had been a profuse greenish-yellow offensive vaginal discharge. She was a clean girl. There was no history obtainable to suggest an origin. There was no trouble with micturition.

Severe Gastric Crises of Tabes Cured by Section of the Posterior Nerve Roots.

—Bramwell and Thompson (Edinburgh Medical Journal,) reports the case of a 33-year-old man who gave a history of chancre in 1901 without secondary symptoms. Ten months thereafter he suffered from attacks of pain in the stomach and vomiting. These attacks continued to recur with increasing severity until the time of operation. After the gastric crises his sight became dim and finally he became blind. A year after the sight became affected he began to suffer from severe lightning pains in the legs, and these pains continued until the operation was performed. The bladder became affected; the knee-jerks and Achilles-jerks were absent; the pupils showed the Argyll-Robinson condition; there was well-marked thoracic and ulnar analgesia. Charcot's disease of the right knee-joint developed. The ataxia was extreme.

Lumbar puncture showed no abnormality in the spinal fluid. The Wassermann reaction was negative. The patient never went for longer than nine weeks without a gastric crisis. His last attack lasted for eighteen days. Thomson resected four pairs of nerves, the seventh to the tenth inclusive—some to a centimeter, others to a centimeter and a half. The dura was stitched up, and the muscles in successive layers. There were filmy adhesions between the dura and the cord. The wound was slow in healing, but now, seven months since operation, there has not been a single gastric crisis. Moreover, the lightning pains in the legs disappeared. The patient's general health has greatly improved. He walks better, according to the statements of the nurses.

Purulent Pericarditis.—Parkinson and Drew report the case of a boy, aged 4½ years, who had an attack of pneumonia involving the bases of both lungs. The urine contained blood, pus, albumin and epithelial and blood casts with many pneumococci. The pneumonia ran an ordinary

course, the temperature becoming normal at the end of ten days, and the signs in the right lung cleared up. The pulse rate, however, remained the same and the heart sounds became muffled, but there was no friction sound or increase of the cardiac dullness. After a few days this latter sign appeared, and finally there was dullness up to the first rib and increase of dullness to the right. At the end of a week there was swelling of the face and some edema over the precordium. Two inches of the fifth costal cartilage were excised and there were evacuated 10 ounces of pus which contained pneumococci in pure culture. The recovery was uneventful, the signs of consolidation at the left base disappeared, and the urine became normal. There were now no signs of enlargement of the heart either clinically or by the x-rays. This case is interesting on account of the exceptionally good result of treatment. The boy now shows no sign of cardiac embarrassment, and the heart moves to and fro when the patient is put on one or the other side. Exploration of the pericardium ought not to be done with the needle, owing to the difficulty of diagnosis of fluid by physical signs. It seems better to open it deliberately, and in that way evacuate its contents, rather than to run the risk of puncturing the heart. In this case the diagnosis was fairly clear before operation, but that is frequently not the case.—Proceedings of the Royal Society of Medicine.

Aortic Regurgitation with Extreme Pulsation of the Aortic Arch; Diastolic Shock and Diastolic Thrill Over the Heart.

Weber reports the case of a woman, aged 28, who during the last month has suffered from severe pain in front of the chest. When aged 15 she had rheumatic fever, and her heart has been said to be "weak." Above the level of the heart to the right of the sternum there is a loud systolic murmur to be heard, and pulsation can be felt, accompanied by a marked systolic thrill. There is much pulsation in the episternal notch. The cardiac apex-beat is displaced to this left axillary region. Over the aortic base there are both loud systolic and loud diastolic murmurs. Over the mid cardiac region there is a loud diastolic murmur, accompanied by a diastolic thrill. With the flat of the hand placed over the heart the diastolic thrill can be felt as if traveling from the aortic base towards the cardiac apex. About the nipple line, in the fifth left intercostal space, a diastolic shock can be felt, which might possibly at first be mistaken for the apex-beat. The Wassermann reaction is positive.—Proceedings of the Royal Society of Medicine.

Cane Sugar in Myocardial Degeneration.—Simon (Birmingham, England, Medical Review) reports the case of a woman aged sixty-six years, suffering from pronounced circulatory weakness due to myocardial degeneration, in which "extraordinary" benefit was derived from the ingestion of large amounts of cane sugar. The patient had been treated with strophanthus, caffeine, saline purges, and later, digitalis, and potassium iodide, without much success, the dyspnea, cyanosis, and edema increasing until it appeared that she could not have many days to live. One ounce of lump sugar was then given morning and evening (later increased to four ounces per diem), with the result that the pulse became regular, its rate dropped from 110 125 to "88 % and later to 72 84 a minute; the edema disappeared, the patient became alert and active, and finally left the hospital entirely free of discomfort. He concludes that, given a suitable type of case, sugar is at least a valuable adjunct in the treatment of obstinate cases of heart failure due to deficient heart muscle without valvular lesion.

Simplification of the Radical Cure of Hernia in Children.—Martin (Revue Médicale de la Suisse Romande) says that the chief feature of Lorthioir's operation consists in leaving the stump of the sac which has been removed at as high a level as possible without division of the external oblique, and without insertion of either ligature or suture. An incision only one and a half inches long is necessary, and the wound can be closed with a couple of suiores or Michel's clips. One great advantage is that the operation takes from two to five minutes only, and the child generally takes the breast three or four hours afterward. In children under three years of age aponeurotic sutures are not inserted; occasionally in older children a suture may be used to diminish the size of the external ring.

He is of the opinion that Michel's clips are preferable in this region, since ordinary skin sutures, which enter the subcutaneous tissues, make infection possible by way of the suture holes along the sutures themselves. The majority of the children at the breast are not detained in hospital.

The writer operates upon weakly children suffering from gastrointestinal disorders without waiting until the health is good, holding that the hernia is often responsible for the alimentary symptoms.

He has performed the operation fifty-eight times with one recurrence. This was in a patient with a double inguinal hernia, that on the left side containing the appendix. The recurrence took place on the left side

the same evening and was spontaneously reduced, but again the hernia appeared, this time with symptoms of strangulation, on the day following. The wound was therefore opened, the cecum and appendix which were found in the scrotum reduced, and the external ring sutured. An uneventful recovery followed.

Lorthioir in his 2000 cases had three recurrences, all in the first twenty-four hours; in each case he operated immediately, reduced the bowel, and suired the ring, with ultimate success. He has never met with a recurrence after a long period whilst practicing this method, nor has he ever met with any mishap attributable to the modification. He was first led to this procedure by finding the scar which had been left by the ligature or suture of the stump at the bottom of almost every sac on which he had to operate for the recurrence of a hernia; and he is of the opinion that the depression formed by a ligature or suture tends of itself to form a new hernia.

The gap in the peritoneal wall is not harmful. An examination of the internal rings of two children operated upon by his simplification and dead from intercurrent maladies showed no intestinal adhesions; nor have any children afterward suffered from intestinal symptoms which could be attributed to adhesions.

Treatment of Mammary Fissures.—

Arquellada, (Revue de chirurgie) advocate the application of tincture of iodine to fissures of the breast. Since iodine causes considerable pain when directly used on mammary ulcerations, the affected region is first painted with a one per cent. solution of novocaine. The child should not be given the breast for from four to six hours after the application, and nursing from the affected organ should be preceded by washing with tepid water of the whole area to which iodine has been applied. The breast as well as the infant's mouth, should also be washed with a solution of hydrogen peroxide before and after each nursing throughout the period of treatment.

The iodine is used on alternate days, and a cure is generally obtained after two or three applications. In a series of twenty-eight cases treated by this method, cure was obtained in every instance in less than ten days, without complications.

"Paraldehyd" possesses many of the good without the evil qualities of chloral. Used in insomnia resulting from various causes. The objectionable taste of the chemical is, to a great extent, disguised in Robinson's Elixir Paraldehyd (see page xiv this issue) which is an elegant preparation.

Influence of Muscular Exercise and the Open Air on the Bodily Functions.

—Hill, in *The British Medical Journal*, says that all the efforts of the heating and ventilating engineer should be directed towards cooling the air in crowded places and cooling the bodies of the people by setting the air in motion by means of fans. In a crowded room the air confined between the bodies and clothes of the people is almost warmed up to body temperature and saturated with moisture, so that cooling of the body by radiation, convection, and evaporation becomes reduced to a minimum. The strain on the heat-regulating mechanism tells on the heart. The pulse is accelerated, the blood is sent in increased volume to the skin, and circulates there in far greater volume, while less goes through the viscera and brain. As the surface temperature rises, the cutaneous vessels dilate, the veins become filled, the arteries may become small in volume, and the blood pressure low, the heart is fatigued by the extra work thrown upon it. The influence of the heat stagnation is shown by the great acceleration of the pulse when work is done and the slower rate at which the pulse returns to its former rate on resting. The increased percentage of carbonic acid and diminution of oxygen which has been found to exist in badly ventilated churches, schools, theaters, and barracks, is such that it can have no effect upon the incidence of respiratory disease and higher death-rate, which statistical evidence has shown to exist among persons living in crowded and unventilated rooms. The conditions of temperature, moisture, and windless atmosphere in such places primarily diminishes the heat loss, and secondarily the heat production—that is, the activity of the occupants, together with the total volume of air breathed, the oxygen taken in, and the food eaten. The whole mechanism of the body is thus run at a lower plane, and the nervous system and tone of the body are unstimulated by the monotonous, warm, and motionless air. If hard work has to be done it is done under conditions of strain. The number of pathogenic organisms is increased in such places, and these two conditions run together—diminished immunity and increased mass influence of infecting bacteria. The bodily mechanisms become trained to maintain the body heat by habitual exposure to open-air life. The risk lies in overheating our dwellings and overclothing our bodies.

The Autoinoculation Test in Tuberculosis.—Crowe, in *The British Medical Journal*, says that Freeman found that massage applied to a diseased joint was followed by an increased amount of toxin in

the circulation, demonstrable by a very definite fluctuation in the opsonic index, provided only that the index was determined with respect to the causal organism. This he termed an artificial or induced autoinoculation, and he was able to utilize his discovery to elucidate the nature of joint troubles of doubtful origin. The example he first quoted was that of a knee joint said to be tuberculous; after massage the tuberculo-opsonic index did not fluctuate, while the index determined with respect to the gonococcus gave a marked and typical fluctuation. The inference drawn by Freeman was that the disease must be gonorrheal and not tuberculous. Hereupon Wright and his collaborators, following out the same line of experimentation, showed that a very considerable number of agencies, such as exercise, operation, Bier's bandage, and even physical examination of the chest, were capable of inducing autoinoculation. Patterson elaborated his treatment for phthisis, consisting of the scientific induction of autoinoculation by carefully graduated labor, and in connection therewith Inman found that as long as disease was still present the varying grades of work produced fluctuations in the opsonic index, while in those apparently cured the most arduous labor was followed by no fluctuation whatever. By means of an apparatus used for testing the vital capacity of the lungs, forced respiration continued over a period of some minutes can be used to induce autoinoculation in a tuberculous lung. The presence or absence of such autoinoculation is then determined by measuring the opsonic index before and at varying periods after the exercise. He concludes that in the autoinoculation test one possesses the means of diagnosing tuberculosis in its earlier stages, that this test is so extraordinarily reliable that on its verdict alone treatment may be confidently applied or as confidently omitted, and, lastly, that it is of utility in directing the course of treatment and in deciding the moment when cure is complete.

Pneumococcal Peritonitis in Children.

—Cameron (*British Journal Children's Diseases*) says that in childhood the only common forms of peritonitis besides pneumococcal peritonitis may be said to be those due to appendicitis, to gonorrheal infection, and to streptococcal infection. Gonorrheal infection may be readily detected by an examination of the vagina and vulva and by a bacteriological examination of the discharges. So-called "primary" streptococcal peritonitis is rare, but can hardly be distinguished from that due to the pneumococcus. In both it is commonly a compli-

cation of septicemia. It results sometimes from infection of the umbilical cord in the newly born; occasionally it follows scarlet fever or terminates chronic nephritis. Rarely it complicates erysipelas in young infants, when it may be associated with edema of the lower extremities. Youth of the patient, onset with rigors, convulsions or herpes labialis, early appearance of delirium or of pronounced diarrhea, the simultaneous presence of pleurisy, pericarditis or pneumonia, the history of repeated attacks of lobar pneumonia, evidence of antecedent colitis, great and rapid exudation of fluid into the peritoneal cavity, high temperature at the onset, marked leukocytosis, and want of localization of pain and rigidity to the right iliac fossa point to pneumococcal peritonitis rather than appendicitis. The treatment of pneumococcal peritonitis commonly advised is by immediate laparotomy and the establishment of drainage. Against this procedure as an invariable practice the writer urges the following objections: (1) In pneumococcal peritonitis there exists no focus of infection which can be extirpated as in appendicitis. (2) The peritonitis is always in the first instance a diffuse general peritonitis involving the whole peritoneal cavity to its furthest recesses. Such a general infection renders efficient drainage almost an impossibility. (3) It is by no means certain, even if it were possible to drain off the exuded lymph, that it is wise immediately to attempt to do so. (4) The disease in the early stages is essentially a septicemia and the danger is in proportion to the virulence of the general infection. It would appear that the cases of peritonitis which recover are those which pass successfully through the pneumococcal septicemia.

Dermatomyositis in a Child.—Batten (Brit. Jour. Child. Dis.) says that this is a rare condition, especially during childhood. Its pathological features are described as a cell infiltration of the interstitial tissue with a degenerative condition of the muscle-fiber. The muscle-fibers are in part destroyed by edema, in part by a leukocytic infiltration. The infiltration is most marked in the region of the vessels. The symptoms of a dermatomyositis may shortly be stated as follows: There is swelling of the extremities due to the inflammatory edema of the subcutaneous tissue and muscles, acute pain, muscular rigidity, great tenderness on pressure, and an erythematous rash resembling erysipelas situated over the affected muscle. The character of the rash may vary to a very great extent; it has been described as resembling urticaria, erythema nodosum, or purpura. The onset of the disease is gradual, there is a moderate rise

of temperature, rigors are absent. When the acute stage passes off, the skin is left in an indurated and inelastic condition, and the muscles are hard and contracted. Dr. Batten records a case in a girl who died when about ten years old after an illness of fifteen months. The positive signs upon which the diagnosis was based were the character of the affection of the skin, the concomitant affection of the subjacent muscles, the periodic attacks of acute swelling of muscles and redness of the skin, and the subsequent induration of the skin and muscles after the subsidence of the acute attacks. The negative signs were the absence of any evidence of affection of the joints, of the blood, of the viscera or of the nervous system, and in addition to these the absence of any sign of syphilis, tuberculosis, trichiniasis, and any form of organism capable of being cultivated on the ordinary media. At autopsy the changes found were limited to atrophy of the skin, fibrous replacement of subcutaneous fat, and degeneration of the muscles, especially in their superficial portion. Those parts of the muscles which are separated from the subcutaneous tissues by a thick tendinous sheath escape affection, while those muscle-fibers which lie in close contact with the subcutaneous tissues and along the intermuscular septa are liable to be affected. Perivascular infiltration of the vessels with small round cells is a striking feature, as is also the thickening of the walls of the vessels and in some cases the actual obliteration of the vessels. Infiltration of the muscle-fibers with lymphocytes also occurs, and gives rise to the occurrence of "lymphorrhages." These occur for the most part in close connection with the vessels, but a few such lymphorrhages can be found which do not appear to have any direct connection with the vessels. The change in the muscle would seem to be due partly to edema and partly to the cutting off of the blood supply to the fibers.

Prognosis of Diphtheria.—Harris (The London Practitioner) makes the following statement:

1. Heart sound.
2. Position of the cardiac impulse.
3. Pulse.
4. Area of cardiac dulness.
5. Extent of surface affected by the membrane.
6. Amount of albumin, and amount of urine passed in the twenty-four hours.
7. Smell of the breath; marked fetor is an unfavorable sign.
8. Color of the membrane; a dark membrane being of evil import.
9. Occurrence of hemorrhages from any mucous membrane or under the skin; small petechiæ are of very grave import.
10. Marked enlargement of the cervical glands.
11. The oc-

currence of certain other symptoms, such as vomiting, abdominal pain restlessness, etc., which are very serious signs. Vomiting occurring to any extent within the first twelve days often betokens a fatal issue, and it is almost invariably associated with altered heart sounds. The following alterations in the heart sounds may be met with in diphtheria, marked in the order of their gravity: (a) Marked irregularity of the sounds associated with reduplication of the second sound (best heard at the apex). The rhythm and the general nature of the sounds correspond very accurately to the noise heard when a horse gallops. These sounds are often heard in the so-called vomiting cases, but they have been heard, in several instances, in which no other symptoms presented themselves. The prognosis is very grave. There is always dilatation and displacement of the apex beat. (b) Both sounds of equal duration, neither of the sounds being accentuated. The sounds are generally shorter than normal, more especially the first sound. They nearly approach the sound made by a watch ticking. The apex beat is generally displaced, but not to the same extent as in (a) and the prognosis is not so grave. (c) Softening (sometimes almost inaudibility) of the first sound and accentuation of the second sound. This condition is often associated with paralysis of the palate. Patients generally recover from this condition, although the convalescence is slow. (d) The occurrence of various murmurs of which mitral systolic is the commonest. That this condition is not that of endocarditis is shown by the gradual disappearance of the murmur. It is really of minor importance, not allow these cases to get up until the 28th day of the disease. The murmur often takes eight to ten weeks to disappear.

Hæmaturia in Appendicitis.—A. von Frisch (Wien klin. Wochl.) discusses the difficulties which occasionally arise in distinguishing between appendicitis and renal and ureteral calculus. Many patients have undergone appendicectomy but have obtained no relief from their symptoms until a calculus has been removed from the renal pelvis or ureter. Hæmaturia would usually be considered to favor the diagnosis of renal trouble, but, though exceptional, it may be a complication of appendicitis. The urinary tract may be affected in appendicitis in various ways. Finocchiaro describes a "reflex vesico uretero-appendiculaire," in which the symptoms may be renal (colic), but are more frequently vesical—pain after micturition, strangury (stranguria appendicularis of Giordano), cystalgia, urethral smarting, and priapism. These symptoms,

provided the urinary tract is found on examination to be anatomically sound, point to incipient appendicitis. The inflamed appendix affects the vesical plexus through the pudendal plexus, and the vesical plexus anastomoses with the renal and hypogastric plexuses. Urinary symptoms may also depend on direct extension of inflammation to the vesical wall. If an abscess ruptures into the bladder hæmaturia combined with pyuria is the rule. In such cases, Hunner (Journal of the American Medical Association, 1908) differentiates between appendicitis and renal or ureteral calculus by the presence or absence of pathological constituents in the urinary sediment. If these rapidly disappear after removal of the appendix the case is one of appendicitis in which some adhesions have probably formed between the appendix and the pelvic portion of the ureter. Hammersley (New Zealand Medical Journal, November 6th, 1909) saw, in 1905, an elderly lady with a slightly movable kidney. After August, 1908, attacks of vomiting, colic, and shivering (but without pyrexia) occurred about every three months. As the attacks subsided hæmaturia regularly occurred. On one occasion the urine had the appearance of pure blood. Nothing beyond the movable kidney could be discovered. In January, 1909, an attack of colic occurred with a rigor and pyrexia and obvious signs of appendicitis. At the operation the appendix, which was on the point of rupture, was found behind the cæcum and adherent to the ascending colon and right kidney. The latter appeared normal, and no calculus could be detected. The patient recovered, and had no more attacks either of colic or hæmaturia. This was probably caused by direct extension of inflammation to the kidney. Carless (Lancet, November 20th, 1909) has observed several cases of hæmaturia in appendicitis. In one case, the appendix was found to be so imbedded in adhesions that removal was impossible. The cause of the hæmaturia was held to be adhesions between the appendix and the ureter, which was the source of hæmorrhage rather than the kidney. In another case it could not be decided whether recurrent attacks of colic, localized in the right side, depended on the appendix, kidney, or gall bladder. The presence of hæmaturia with a deposit of sand in the urine indicated a probable diagnosis of impacted ureteral calculus. But most minute investigation by cystoscopy, catheterism of the ureters, and radiography failed to reveal any abnormality. A week later death occurred from perforation of an appendicular abscess. The only discoverable cause for the hæmaturia was firm adhesion of the appen-

dix to the ureter. Von Frisch has collected 13 reported cases of hæmaturia in appendicitis. In six adhesions between the appendix and ureter were regarded as the cause. In three inflammation had spread directly to the right kidney. In two there was probably toxic nephritis, and in two no satisfactory explanation could be advanced. He now records two cases of his own.

Case 1.—A man, aged 20, had suffered since childhood with attacks of colic localized in the gastric region. In 1897 the character of these attacks changed in so far as the pain became localized chiefly on the right side of the abdomen, and radiated from the right renal region to the pubes. Renal colic was suspected, but the urine was normal. Between the attacks the man was perfectly well. In January, 1893, after a violent attack of colic, hæmaturia occurred. The urine presented the characters of renal hæmorrhage, with a copious dark, brownish-red deposit consisting chiefly of blood and epithelial casts. There were also a few altered erythrocytes, but no crystals or other inorganic element in the deposit. The urine was sterile. The hæmorrhage persisted for three days, when it ceased abruptly. The right kidney was neither enlarged nor tender, but this attack appeared to confirm the diagnosis of renal colic. A few weeks later another attack occurred, which exactly resembled renal colic. The temperature rose to 103.4° , and the pulse was 120, small, and intermittent. After repeated vomiting, hæmaturia again occurred. The urine gave a copious deposit of blood casts. During this attack the region of the appendix was extremely small and resistant. Two days after the onset the urine was normal. But the symptoms of appendicitis became pronounced, and laparotomy was performed. The appendix was extremely inflamed, but was directed outwards, and was not adherent to the kidney, ureter, or bladder. After the operation, an abscess formed in the recto-vesical pouch, and eventually discharged through the rectum. The urine remained normal. Evidently the symptoms from the first were of appendicular origin, and the hæmaturia was a complication.

Case 2.—A man, aged 30, after an attack of colic on the right side, had hæmaturia. The colic appeared suddenly after exercise. The urine was of a dark, brownish-red color, and contained a quantity of altered erythrocytes and a few blood casts, but no crystals. The hæmaturia was ephemeral and the urine became normal. Six months later a second attack of colic with hæmaturia of five days' duration occurred. The blood appeared to issue from the right ureter, but as no flow of any kind was ob-

served from the left ureter a bilateral source could not be excluded. The hæmorrhage ceased as abruptly as before. Soon the patient began to complain of chronic constipation, distension, and occasional pain in the region of the left iliac fossa and splenic flexure. Nothing was revealed by palpation or the x-rays. A few months later a third attack of hæmaturia occurred, with obvious signs of appendicitis. An operation was postponed until three weeks later, during which time there were two further attacks of hæmaturia. The appendix was found extensively diseased, but nowhere adherent. As it was directed outwards, it did not come in contact with any part of the urinary tract. Nevertheless, the attacks of hæmaturia definitely ceased after removal of the appendix, and during a prolonged period of observation the urine remained normal. In both these cases the hæmaturia was undoubtedly of renal origin, although it occurred only in connection with attacks of appendicular colic. A satisfactory explanation of its cause is hard to give. The invariably abrupt termination and the normal character of the urine in the intervals rendered toxic nephritis improbable. Septic embolism of the cortex might explain the symptoms, but the urine was sterile. Probably aseptic renal infarction with thrombosis occurred in both cases.—British Medical Journal.

Lateral Anastomosis of Portal Vein and Vena Cava in Treatment of Cirrhotic Ascites.—Danis (Ann. de la Soc. Belge de Chir.) points out that the treatment of ascites in cirrhosis of the liver may be symptomatic or causal—that is, directed towards getting rid of the fluid or preventing its formation. The operations directed towards diverting the portal blood by an extra hepatic channel into the general venous current seem to be the more rational. These are: Omentopexy (Palma); section of portal vein and termino-lateral anastomosis in vena cava (Eck-Vidal); suture of the ovarian vein with the mesenteric (Villard and Tarnier). The author is of opinion that the formation of latero-lateral anastomosis of portal vein with vena cava so as to divert incompletely the blood coming from the intestinal tract constitutes a superior method to any of these mentioned. Technical difficulties are great. The first and greatest is that interruption of portal circulation is dangerous; and the second is that thrombosis is common after such operations. The first difficulty is overcome by the employment of hæmostatic forceps suggested by the author. This is a strong forceps whose blades, curved towards the extremity, terminate each by a large oval window. The grip is regulated by a screw.

The windows are intended to bite on the two veins in such a manner as to isolate the fixed portion to be joined by sutures from which the blood will be excluded during the operation. The free portions of each vein are outside the oval windows. In closing the bite the endothelium must not be injured. The suture is performed within the windows. The author has after some attempts succeeded in making in the dog a cavo-portal anastomosis which proved to be water-tight and with permeable lumen. He thinks that as the vessels are larger the operation should not prove to be so difficult in the human subject. The vena cava is deperitonized for some centimetres; the portal vein is freed in the neighborhood of the foramen of Winslow. The vessels are united by a row of continuous sutures of vaselined silk; then the forceps is applied so as to include in the windows equal-sized ovals of vein wall. The free portion of the cava lies between the branches of the instrument. An oval piece is cut out of the wall of each vessel 6 to 7 mm. broad and 2 cm. long. The posterior cut edges are sutured with fine vaselined silk by a continuous Lembert suture reversed—that is, introduced on the inner surface of the vein, and the anterior cut edges are sutured by continuous U stitch. In both stitches the cut edges are doubled outwards, so that the endothelium of both vessels is in contact. The author admits that the experiment is still too limited to be of much value, but he hopes to continue his researches. Several diagrams explain clearly the method.—*British Medical Journal*.

Treatment of Cleft Palate.—Murray, in *The London Lancet*, is opposed to the Lane turnover flap method on the basis that it leaves a rigid soft palate, and states that in the exhibition of late results there can be no doubt as to the respective merits of the Lane as compared to the ordinary procedure. When such demonstration was held there were several cases in which a complete cleft of the hard and soft palates had been closed by the ordinary plan during childhood, and in which the speech was natural, and the words "British constitution" could be repeated clearly and distinctly. On the other hand, in any case in which the cleft had been closed by Lane's method, articulation was so very imperfect that it was difficult to understand what was said. In all cases in which articulation was distinct the soft palate was seen to be normal in form and in movement; in all cases in which Lane's method had been used the soft palate was short, stiff, and stationary, accounting for the defect in articulation, for which, unfortunately, no

remedy can be supplied. The evidence obtained from patients who had been operated upon was overwhelmingly in favor of closing the cleft in the ordinary way, whilst the extremely unsatisfactory articulation of patients operated upon by the turnover flap method proved that it is wrong in principle, defective in practice, and to be utterly condemned.

With Brophy's operation the writer was not at all successful. In one case, instead of the bones sliding toward each other on the same plane, and so obliterating the fissure in the palate, they hinged at the side of the fissure in such a fashion that any further pressure would only have resulted in the alveolar margins of either side meeting in the middle line.

As to the Langenbeck or ordinary operation, when the fissure is narrow and involves the soft palate only, operation may be performed with success during infancy, but it is better to wait until the second or third year. The author prefers to operate in the summer months, and considers the cleft palate season opens on May 1 and closes October 1.

The mouth and nose should receive daily careful cleansing. Chloroform is preferred as an anesthetic. The child should be lying on the back with the head and shoulders raised. The whole cleft is closed at one sitting. The edges of the fissure are pared obliquely, thus securing broad raw surfaces. The blood and mucus are sucked away from the mouth and throat by a glass syringe which has a piece of rubber tubing attached. In order to be quite sure that the edges of the wound are everted and raw surfaces brought together, one or two button sutures are employed. Silver wire and fine silkwormgut are used for suturing, and at times to relieve tension the writer surrounds the flaps with tape impregnated with Horsley's wax. After the operation the stomach is frequently washed out, the stomach tube being passed through the nostril. The after-treatment is almost entirely a question of nursing, the chief points being to keep the mouth clean and to maintain the child's general health. In children over four years of age nasal feeding may with advantage be used during the week following the operation, but in younger children it is impracticable. In ordinary mouth feeding milk should not be given, for it clings to the stitches, is difficult to wash away, and undergoes fermentation changes. Half an hour after each feeding the palate should be cleansed by syringing with warm water. If the child will not permit this, a drink of water must be given at the conclusion of each meal.

The Treatment of Sciatica by Means of Intraneural Injections of Saline Solution.

Ilay, in The London Lancet, says that in making the injection he uses an ordinary antitoxin syringe fitted with a needle four centimeters long. To find the nerve he has been in the habit of using a method the name of whose inventor he has forgotten. With the patient lying prone he identifies the posterior superior iliac spine and from it draws two imaginary straight lines, one to the tip of the great trochanter and one to the inner margin of the ischial tuberosity. He bisects the angle thus formed and measures $6\frac{1}{2}$ centimeters along the bisecting line. Round the point thus obtained he presses firmly with his thumb until he finds a spot at which pressure causes pain along the course of the nerve. He marks this spot by pressing his thumb-nail firmly into the skin so as to indent it.

The skin is then cleansed and the needle of the syringe, already filled with saline solution at blood heat, is inserted perpendicularly to the surface until it reaches the bone, and then withdrawn about half a centimeter. Before proceeding to inject it is necessary to make sure that the point of the needle is actually within the nerve sheath. Most operators state that when the needle pierces the nerve the patient's leg jerks convulsively. In many cases this is true, but in others, especially if they have been injected previously, no such indication is given. Having inserted the needle, therefore, as described above, it is well to press gently on the end of the plunger so as to expel a few drops of fluid from the needle, and ask the patient if he feels anything. If the needle be within the nerve sheath he will reply that he has a sensation as of trickling or crawling, or in rare cases of actual pain, and will indicate the direction of the sensation by drawing his finger downward along the line of the nerve. The distance downward to which this sensation extends varies in different cases, and in the same case at different sittings. It may stop at mid-thigh, or may pass downward as far as the foot. When this sensation has been elicited the syringe should be emptied rapidly, the needle withdrawn, and the puncture sealed. In his latest cases Ilay has used Heck's landmark, and is of opinion that it is even more useful than that described above, especially in fat patients, in whom it may be difficult to identify the inner margin of the ischial tuberosity.

After injection, if the pain beforehand has not been sufficient to confine the patient to bed, he is made to get up and walk about slowly, and if he be an out-patient he is sent home immediately. In cases in which he has been confined to bed he is allowed

to lie still until he feels himself free from pain.

Syphilitic Disease of Aorta.—Goldschneider (Wien. med. Klin.) describes his experience of syphilitic disease of the aorta, an experience which includes since January 1, 1910, 97 cases seen in private and 39 cases from the university polyclinic, of which the details were supplied by Weinberg. The cases include 42 of aneurysm of the aorta, in 15 of which there was also aortic incompetence, 25 of aortic incompetence, 28 of syphilitic aortitis without a aneurysm or incompetence, 37 of general arterio-sclerosis, 4 of affections of the heart muscles without demonstrable disease of the vessels. He says that aneurysm of the aorta when of small size is often overlooked because of inadequate percussion. Five of the 42 cases of aneurysm were also suffering from tabes. During the period covered by these observations the author was also in charge of 19 cases of aneurysm of other than syphilitic origin. The diagnosis of syphilitic aortitis without aneurysm is not always easy. Among the subjective symptoms are a sense of oppression, pressure and pain in the cardiac region, passing to the shoulder and made worse by movement, by exposure to cold air or wind, and sometimes by eating; sometimes also there is pain in the back or right half of the chest, palpitation and quick pulse with or without arrhythmia. Objectively the first sound over the aorta is impure, or there is a systolic murmur with a ringing second sound and an increased area of dullness over the aorta; sometimes general arterio-sclerosis is present, frequently increased blood pressure, and sometimes a small increase in the size of the Roentgen ray shadow. The cardiac changes are not striking, but hypertrophy and very occasionally dilatation of the ventricle may be present. The fact of syphilis was demonstrated in all the author's cases. The majority of the patients were between 30 and 55 years of age—that is, were at a period of life in which marked arterio-sclerotic changes, other than those of syphilitic origin, are not common. The presence of tabetic symptoms is of special value for the diagnosis of the syphilitic character of aortic and vascular diseases. Tabes was present in 29 out of 136 cases, though the symptoms were often slight and might easily be overlooked. Long observation and treatment were possible only in a minority of the cases. The author's conclusions are that (1) syphilitic disease of the aorta is relatively frequent and occurs more often in men than in women; (2) the majority of cases of aortic aneurysm and of aortic insufficiency depend on syphilis; (3) syphilis is a frequent cause of diseases usu-

ally described as arterio-sclerosis; further observations are, however, needed to determine whether syphilis is the essential or only a contributory cause; (4) anti syphilis treatment of syphilitic diseases of the aorta should be much more frequently and energetically carried out than has been customary, and early diagnosis and treatment is necessary; (5) iodine treatment alone is generally insufficient. Even when iodine causes subjective improvement treatment with mercury or salvarsan is also indicated. With regard especially to syphilitic aortic aneurysm he finds (1) that specific treatment has undoubtedly a favorable effect on the syphilitic disease of the wall of the aorta; (2) a certain amount of retrogression in small aneurysms, and even occasionally in those of medium size, can be traced, and advance can to some extent be checked; (3) iodine treatment alone has not been found to have any appreciable effect upon syphilitic aneurysm of the aorta; (4) general treatment is needed in combination with anti-syphilitic treatment; (5) repetition of the anti syphilitic treatment is indicated undoubtedly on any return of symptoms.

Pelvic Cysts Due to Spinal Meningocele with Notes of a Case.—Fairbairn (Jour. Obst. Gyn. Brit. Emp.) describes a case of this unusual condition occurring in a single girl of 18 who was suffering from what was supposed to be a second attack of appendicitis. On vaginal examination a large rounded, elastic and tender swelling was felt immediately inside the fourchette, bulging forward the right postero-lateral vaginal wall. It formed a decided obstruction to the passage of the finger into the vagina. The cervix was felt high up and the body of the uterus appeared to be normal and freely movable. The upper border of the cystic swelling was not made out definitely, but it appeared to extend upwards into the hollow of the sacrum. Per rectum the swelling was felt behind and to the right of the rectum. With one finger in the vagina and one in the rectum it was found that it did not extend into the recto-vaginal septum. As the result of the examination the tumor was thought to be a cyst in the pelvic connective tissue—possibly a post rectal dermoid—and as it was so low down and bulged into the vagina and perineum it was decided to attempt its removal by a perineovaginal section. It is pointed out that the height to which the cyst extended up the sacrum was not suspected as it could not be felt per abdomen and its upper boundary could not be defined by the bimanual examination owing to the encroachment of the cyst on the

vagina making this examination difficult. On exploring the cavity with the finger the cyst was found to extend up to about the sacral promontory and its wall was found to be so closely incorporated with the periosteum of the sacrum that its removal was impossible. In front the finger in the sac was separated from the bowel and other contents of the pelvis by the front wall of the cyst and the posterior layer of the pelvic peritoneum, through which could be felt coils of intestine. It was decided to close the sac and the wound and see if simple evacuation of the sac would suffice. The sequelae were a faecal fistula which closed, a sinus communicating with the cyst, from which a watery purulent discharge escaped, and finally spinal meningitis and death within two months of the operation. Autopsy showed purulent meningitis and a probe passed inside the dura down the sacral canal entered the cyst cavity by a minute orifice below and to the right of the sacral promontory. In commenting on this case and those recorded in the literature, Fairbairn points out that spinal meningocele forms one of the rare varieties of cysts which may be met with in the pelvis and abdomen. As the common result of interference with these tumors is death from septic meningitis the advisability of their mention in the larger text-books is urged, for the possibility of their being met with should be present in the mind of those whose work especially lies with the surgery of the female pelvic organs. Such cysts are commonly associated with some defect in the anterior part of the vertebral column, most frequently of the sacrum. Generally a small or medium sized cyst is found occupying the sacral hollow and extending downwards into the pelvic connective tissue and bulging into the vagina. A cyst lying deep in the pelvis behind the rectum or pushing the bowel to one side should suggest the possibility of its origin from the spinal membranes, though it is not likely a correct diagnosis can be made. The largest contained three litres, the next largest contained two litres. Apparently they are found almost exclusively in children or young women. Attention is drawn to them by the presence of an abdominal tumor or by abdominal pain with sometimes backache, headache, and sickness, or by some accidental complication, e.g., by the cyst forming an obstruction to labor. As in cases of spina bifida generally, such malformations as club-foot are to be expected, but it is interesting to note that among the few cases mentioned a bicornute uterus was found twice, vagina duplex and uterus didelphys once; and that dilatation of the ureters was noted twice and bilobed kidney

once. The bony defects which allow of the meningeal protrusions vary greatly in degree.

Anemic Vomiting.—Beddard (The London Practitioner) says that anemic girls frequently suffer from indigestion. He says that only a few years ago did he realize that they are liable to severe attacks of epigastric pain and vomiting, which may be mistaken for gastric perforation and frequently for gastric ulcer, and after quoting from illustrative cases the writer proceeds to discuss the subject under these heads: (1) What are the symptoms of anemic vomiting, and to what are these attacks due? (2) How does one diagnose the condition from gastric ulcer? (3) How is the condition to be healed?

Pain is a prominent symptom. It follows the digestion of food and is relieved by vomiting. The vomiting he says points to a hyperesthesia of the mucous membrane of the stomach which in turn is due to a dilation of the heart. A stretching of the cardiac muscles being a common process in these anemic girls often associated with referred pain as in skin and muscles the left breast and (2) mucous membrane of the stomach, which pains are worse after exertion and may induce the unwary to open the abdomen.

The diagnosis is considered under the following heads:

Hematemesis.—A recent attack or even a history would be a strong point in favor of gastric ulcer. The writer does not believe a hematemesis possible without a lesion of the gastric mucous membrane and considers that hematemesis indicates the presence of either an actual or potential ulceration.

Pain and vomiting have not a constant relation to meals as in anemic vomiting and some of the most severe attacks occur apart from food altogether, and sudden exertion or being tired brings an attack.

Abdominal tenderness and rigidity.—In gastric ulcer rigidity is a marked symptom and may be present while tenderness is slight.

Cases of anemic vomiting show a wide area of tenderness with rigidity in the proper sense of the term absent.

Constitutional disturbances.—In anemic vomiting the almost complete absence of constitutional disturbances is marked.

The heart.—The ultimate cause of anemic vomiting being regarded as stretching of the heart, it is important to ascertain its size. If it be found of normal size and there is no skin tenderness it is safe to conclude that it is not a case of anemic vomiting.

Treatment is absolute rest in bed until

the heart has returned to its normal size for at least five to six weeks, full diet, and among drugs, Fowler's solution has been found best.

Miscellaneous.

Hedonal as a General Anesthetic.

This synthetic product—methyl-propyl-carbinol-urethane—more powerful than its congener urethane, was introduced some few years ago as a hypnotic. It may be prepared from methyl-propyl-carbinol, which is warmed and acted upon by urea nitrate. It forms fine, long, needle-shaped crystals which melt at $76^{\circ}\text{C}.$, are slightly soluble in cold water, although more readily so in hot water. Its taste resembles that of menthol. In action it is similar to trional, and, according to de Moor, it is strongly diuretic when administered in solution. With alkalis hedonal when boiled decomposes, but boiling in neutral solution does not alter its composition.

Dreser, who has studied the pharmacology of this drug, regards it as a powerful diuretic, and attributes its action in this direction to its being split up in the organism into carbon dioxide, water, and urea. He asserts that it is ten times more powerful as a hypnotic than urethane; that it lowers blood-pressure, but does not interfere with respiration, but upon this last point his experiments are in conflict with the clinical experience of Federoff and others.

Guided by the experiments of Lampsakow upon lower animals, Krawkow was led to employ hedonal as an antecedent to the administration of chloroform. He found that about 3 grammes (45 grains) lessened the quantity of chloroform required and diminished the severity of all after-effects. S. P. Federoff was led by experiments on animals, which revealed the fact that intravenous infusion of hedonal produced anesthesia without danger, to extend its use to man. In his first cases he employed 4 grammes of hedonal in mucilage as a rectal injection two hours previous to intravenous infusion of 0.75 per cent. hedonal in saline solution introduced immediately before the operation; 200 to 300 Cc. produced anesthesia, and subsequent infusion of 50 to 100 Cc.—that is, 6 to 10 grammes—sufficed for a single anesthesia. Subsequent experience has led Federoff to dispense with the rectal injection and to rely solely upon intermittent or continuous infusion of a 0.75 per cent. warmed and filtered solution of hedonal. He plunges a curved needle into the peripheral part of a vein. After 100 to 150 Cc. have entered drowsiness supervenes,

and in a minute or two deep sleep occurs. If the flow is too rapid respiration stops, but in his experience is readily restarted by a few compressions of the chest. He has employed the drug in this way in 530 cases. The utmost amount which should pass into the vein in a minute is 100 Cc. The limits of quantities which are requisite for operation lie between 400 to 8000 Cc. It must be remembered that given by the mouth the dose is reputed to be from 15 to 45 grains.

A. T. Sidorenko has recorded similar experiences, and concurs in Federoff's statements that the after-effects are usually extremely slight. He points out, however, that excitement may occur during the stage of recovery for a long time after the operation, and that when in that state the tongue is liable to fall back and lead to suffocation. Jeremirsch, pursuing Federoff's method, failed when making the infusion into veins of the leg in two cases out of sixty-five. The limits of quantities used by him were 325 to 1100 Cc.

This system has up to the present been used with equal success in various Continental clinics, and in England to some extent, notably by Mr. C. M. Page at St. Thomas's Hospital. After an experience of over 100 cases, Mr. Page, who employs a continuous infusion method, regards the plan as valuable in many cases. So soon as anesthesia is established, he only permits a very slow rate of flow, and graduates the dose to the age of the patient; his patients have included young children as well as adults. He has met with no deaths due to the hedonal, and after-effects have been trifling or wholly absent.

It is impossible to estimate the mortality, as so few cases in which the drug has been used to produce general anesthesia have been reported. Last month an inquest was held as to the death of a man, aged forty-eight, in the Golden Square Throat Hospital, London, where hedonal had been given as a general anesthetic; he appears to have died in the postoperative stage. The verdict, in accordance with the medical evidence, was that death was due to heart failure from blood poisoning, accelerated by the administration of the anesthetic and the operation. A death has also been reported from Hull; in this instance Mr. Page's technique was followed, and the death appears to have resulted from respiratory failure some few hours after the operation was completed and all apprehension of danger had passed. A third death, recently reported from the Hospital for Sick Children, Great Ormond Street, was that of a girl, aged eight, whose respiration failed as the stitches were being inserted. In this case the pathologist considered that

status lymphaticus was a contributory cause of death.

The obvious objection to drugs such as hedonal is the long time their hypnotic effect persists—a peculiarity which is an advantage during the operation, but a danger during the period of recovery.—British Medical Journal.

Rapid General Paralysis.

Prof. Lepine discusses the question of the duration of general paralysis. The opinions of the various authors who have written on this subject are greatly different, some of them considering that a year or a year and a half is the most common duration of the disease, while others state that death occurs only after five years or more. About one-tenth of the cases seen by Prof. Lepine had a very rapid evolution—less than a year. According to Prof. Lepine's experience, the cases which have such a rapid evolution may be divided into three main classes: First class: "intellectuals," i.e., patients whose brain has had severe and prolonged overwork; among these, patients belonging to liberal professions are very frequently met with. Second class: patients without overwork, but with irregular hygiene, like railway officials or omnibus drivers. Third class: syphilitic patients whose mercurial treatment has not been carefully conducted or supervised. These patients have neglected Prof. Fournier's advice: "Energetic treatment at the beginning, safety treatment in the later stages, and rest during the intervals."

To sum up, Prof. Lepine thinks that if the average duration of g. p. seems to be longer nowadays it is because we are able to make an early diagnosis; conversely there seems to be nowadays an increase in the number of the cases with a rapid evolution.—Progres Medical.

Treatment of Cardiac Asthma.

In most cases of cardiac asthma, digitalis will be indicated, but until this drug improves the heart action, morphine will usually be necessary. While the effect is generally prompt, a serious defect is the necessity of constantly increasing the dose. According to A. Fraenkel an excellent substitute is heroin hydrochloride. It may be given alone in doses of 0.005 to 0.15 Gm. or in combination with morphine (morphine 0.008 Gm. with heroin 0.004 Gm. up to morphine 0.01 Gm. with heroin 0.005 Gm.) The patients do not so readily become accustomed to the heroin and it usually is not necessary to increase the dose. Heroin also does not injure the heart; thus in one case of poisoning with 0.03 Gm. artificial res-

piration for two hours was necessary while the pulse frequency did not exceed 80 beats per minute. When there is extensive sclerosis of the coronary arteries and the patients also suffer from attacks of angina pectoris, digitalis may do more harm than good and caffeine should be substituted. It is a well known fact that caffeine will constrict the peripheral vessels but dilate the coronary arteries and thus improve the blood supply of the heart itself. Fraenkel has also seen good results from oxygen inhalation and vasotonin injections.—Therap. Monatshefte.

Muco-membranous Colitis.

Surmont and Detron (*Echo med. du Nord*) deal with the etiology, pathogeny, and therapeutics of this condition. They point out that in the normal state the mucus elaborated in the upper part of the digestive tube dissolves itself in the faeces partly at the level of the terminal portion of the ileum and partly in the colon, and so the faecal bolus on evacuation is free from any appearance of mucus. Roger has shown the mechanism of the coagulation of mucus to be due to a special ferment to which he has given the name of "mucinase." This action can be largely prevented by certain agents, one of the most efficacious of them being the bile. This explains in the normal state the solution of the intestinal mucus in the faeces. The point is borne out by clinical evidence of a number of pathological states in which the frequency of muco-membranous colitis has been noted coincidentally with diminished biliary secretion. The authors have further demonstrated by a series of experiments on rabbits the fact that mechanical irritation determines a state of spasmodic constipation with hypersecretion of mucus. An interesting result obtained by the same authors was that faradization of the pneumogastric nerve brought about the syndrome of myxorrhoea. Bacterial infection also was artificially proved to play a part in this condition. For this it is not necessary for the bacteria to be placed in immediate contact with the mucosa. The elimination of certain substances, such as sodium oxalate and uric acid, brought about the same result. This is not, of course, confined to the intestinal mucosa, as it is a general property of mucous membranes. Applying these results clinically, the authors were led to affirm that the causes of muco-membranous colitis are many and complex, and require individual elucidation. In one group of cases mechanical irritation, such as is produced by scybalous masses, may explain the pathogeny of the condition, but this does not follow in every case. The further

factor of the chemical composition of the faeces has to be considered. Another cause of the condition, according to the authors, is the practice of enteroclysis, a form of treatment often administered badly and without pressing therapeutic indications. These injections are frequently too hot or too cold, or given at too high pressure. Spasm of the bowel is the preponderating element in another group of cases, although its importance may easily be overestimated. There are many instances of enterospasm occurring in cases in which there is no evidence whatever of muco-membranous colitis and, on the other hand, there are cases—although these are rare—of the condition in which there is no spasm but actual atony of the bowel. In the author's view these cases of enterospasm ought to be regarded rather as a symptomatic than a pathogenic group. The origin of the spasm is frequently reflex, and the source of irritation may be quite distant, such as the central nervous system. Or it may arise from a chronic appendicitis, cholecystitis, metritis, or any inflamed abdominal organ. A careful examination of the patient is necessary in such cases, embracing the state of the nervous system, the genital organs, and the digestive apparatus. The group of gastrointestinal dyspepsias, indeed, are responsible in the case of a considerable proportion of the victims of myxorrhoea. In many of the cases the mucous colitis is the symptom uppermost, and the dyspeptic state causing it is often latent. Insufficient biliary secretion has already been alluded to as being responsible in many cases for the condition. With regard to treatment it is not desirable to have immediate recourse to symptomatic remedies, but to seek systematically the category in which each individual case may fall. This is indispensable. The authors do not recommend the practice of enteroclysis, and point out that in the thermal spas this view is now being taken. Every effort should be crystallized in an endeavor to unravel the precise etiology of individual cases.—British Medical Journal.

A Year's Experience of Salvarsan.

Magnus Moller (*Deut. med. Woch.*) reviews his experience of salvarsan which he has used at the St. Goran Hospital since August, 1910; 156 cases of syphilis were treated with salvarsan alone, the drug being given subcutaneously in 24 and intravenously in 132 cases; altogether 341 injections were given, Wechselmann's technique being adopted for the subcutaneous injections. Since November, 1910, Schreiber's intravenous method was employed, to the almost complete exclusion of other methods. The subcutaneous and intramuscular injec-

tions were abandoned on account of the local infiltration, pain, and stiffness which usually followed. Patients who had experience of both the subcutaneous and intravenous methods preferred the latter, as the subsequent pain and discomfort were less marked and prolonged. Intravenous injections of salvarsan ranged from 0.35 to 0.70 gram for adults. Usually the first injections were followed in four to twelve hours by a temperature which in some cases rose to 104° F. The rise of temperature was much slighter or even absent after the later injections, and it is liable to escape attention unless the temperature is taken every two hours. Many of the patients suffered from headache, nausea, vomiting, and diarrhoea; the sleep was also disturbed, and there was sometimes violent perspiration on the following night. In two cases thrombophlebitis was observed above the site of the injection, but no ill-effects followed. In two cases cyanosis, restlessness, and tremor of the limbs were noticed, and twice scarlatini-form eruption appeared. Relapses referred to the nervous system were also observed. The excretion of arsenic by the kidneys was found to vary with the method of administration of the drug; after a subcutaneous injection it is very slow, and traces of arsenic are found in the urine several weeks after the injection. A considerable amount of arsenic is present in the urine a day after an intravenous injection, and three or four days later there are only traces of arsenic to be found. But in one case 0.97 mg. of arsenic was found in the day's urine twenty days after an intravenous injection of 0.70 gram of salvarsan. When it was found that the symptoms grew worse, or that relapses followed single subcutaneous or intravenous injections, the system was adopted by which the subcutaneous injections were repeated at intervals of two months, and the intravenous injections at intervals of two to three weeks, and later of one to two months. In the case of strong men the intravenous injection was repeated in a week. Although the spirochaetes usually disappear from the primary sore and papules within a couple of days of the injection, they were once found in a chancre of the lip twenty days after an injection, and they disappeared only after a course of mercury. Primary and secondary syphilis reacts even more quickly to salvarsan than to the soluble salts of mercury; in tertiary syphilis salvarsan is on a par with potassium iodide. The action of salvarsan and mercury on hard sores, papules, and sclero-adenitis is equally rapid, and Wassermann's reaction is not more rapidly affected by salvarsan than by the older drugs. Many of the

earlier cases treated with salvarsan improved temporarily, but relapses occurred oftener than with systematic mercurial treatment. The relapses were less frequent after salvarsan had been pushed, and in two tables comparing the effect of the early and less vigorous use of salvarsan with the more recent and systematic procedure, Professor Moller shows that the percentage of relapses was 34 in the first and only 13 in the latter case. In two cases of syphilis maligna praecox (pustulo ulcerosa) salvarsan had a strikingly rapid and effective action. The salvarsan compound which contains jodipin and lanolin, and which is sold as "Joha," was used in four cases according to Schindler's technique, but though the pain at the site of injection was less than with the technique of Wechselmann and Duhot, it was still considerable, and the intravenous injections were therefore again resorted to. Professor Moller admits that the combined treatment of syphilis with salvarsan and mercury may be beneficial, but he prefers to continue at present with salvarsan alone, in order that the value of this drug alone may be accurately gauged.—The Calcutta Medical Journal.

State Board Examination Questions of Washington.

ANATOMY.

Twelve questions; answer ten.

1. Name the bones of the cranium. Give the anatomy of the inguinal region and the perineum.
2. Give the contents of the nine regions of the abdomen.
3. Give origin, course, and distribution of sciatic nerve.
4. (a) Name the branches of the aorta—ascending, arch, and descending. Give course and distribution of the carotid. (b) Give and describe the blood supply of the stomach and bowels. Describe the pulmonary artery.
5. Name the muscles of the abdomen and give origin and insertion.
6. Name and give relation of the important organs, vessels, nerves, muscles and structures of the neck.
7. Give origins and insertions of muscles of the shoulder.
8. Give muscular and tendinous attachments of patella.
9. Give the course of the external and internal saphenous veins.
10. Describe the portal circulation.
11. Describe the sympathetic nervous system.
12. Give anatomy of ear and mastoid and their relations.

HISTOLOGY.

Twelve questions; answer ten.

1. Name and describe the membranes of the brain.
2. Describe red blood corpuscle and tell source of origin
3. Give structure of human skin.
4. Describe the appearance of healthy adult liver as seen by the microscope.
5. Locate and give structure of Peyer's patches.
6. Name, describe and locate two types of epithelium.
7. Where are the nerve cells found?
8. Locate the thyroid gland and describe its structure.
9. Name the layers of the retina.
10. Name the varieties of muscle and state difference between them.
11. Describe nonmedullated fibers and where occur.
12. Give histological difference between the pyloric and cardiac end of stomach.

PHYSIOLOGY.

Twelve questions; answer ten.

1. Name the principal groups of the normal constituents of the body and give illustrations of each.
2. What are carbohydrates, and what part do they take in the general metabolism?
3. What is the distinguishing element of (a) albuminous substances? (b) Hydrocarbonaceous substances?
4. Why is an exclusive diet of (a) animal food not suited to man's needs? (b) Vegetable substances?
5. Name the fluids secreted by the digestive apparatus. Where secreted, and reaction of each?
6. Describe the gastric juice; its action and the product of gastric digestion.
7. Describe the chyle, and how does it enter the general circulation?
8. Describe briefly the phenomena of the coagulation of the blood.
9. What are the *glandulae solitariae* or solitary glandules? Where found? Their function?
10. Describe the iris and give its function.
11. Describe the composition of the blood and the function of its component parts.
12. What is the physiological significance of diabetes, or sugar in the urine?

CHEMISTRY.

Twelve questions; answer ten.

1. What is urea? How would you determine the amount?
2. What degree Fahrenheit is 95° C.?
3. Write the formula of (a) baking soda, (b) lunar caustic, (c) cream of tartar, (d)

chloride of lime, (e) fire damp.

4. Give the chemical difference between calomel and corrosive sublimate.

5. What is (a) water of crystallization, (b) efflorescence, (c) deliquescence?

6. What are proteids? (b) From what are they derived? (c) Name the chief proteids.

7. Describe H_2O , (b) its properties. (c) What is the purest natural H_2O ?

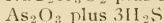
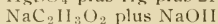
8. Name the halogens. Give their symbols and atomic weights.

9. Describe the various allotropic forms of carbon.

10. What is meant by a volatile liquid? Name one and give its formula. (b) Same question relative to a fixed liquid.

11. Define (a) calorie, (b) synthesis, (c) molecule, (d) fusing point, (e) osmosis.

12. Complete the following equations and write the name of each resulting compound under its formula:



TOXICOLOGY.

Twelve questions; answer ten.

1. Define a poison. Give methods in which they may be introduced into the organism.

2. Give classification of poisons.

3. Give effects local and remote of poisons in general, and indicate the particular poisons that affect particular organs or structures.

4. What are ptomaines?

5. Give symptoms of mushroom poisoning.

6. Name the poisonous gases most commonly met with and give their symptoms.

7. Give symptoms of poisoning by arsenic; (b) give symptoms of poisoning by phosphorus.

8. What diseases may follow from eating pork? Describe them.

9. Describe idiosyncrasy and tolerance and state what effect they may have on poisoning.

10. Does the habitual taking of poisonous drugs diminish the risk of the latent or insidious remote effects?

11. What is wood alcohol? How may it be recognized from grain alcohol? Describe symptoms of poisoning by same.

12. What is denatured alcohol? Is it a poison? In what kind of poisoning may a scarlatina-like rash appear?

PATHOLOGY.

Twelve questions; answer ten.

1. What are the characteristics of a growth which make one pronounce it malignant? What are the principal subdivis-

ions of malignant growths, and how do you distinguish them?

2. Give the pathological appearance (macroscopical and microscopical) of the kidney of chronic interstitial nephritis and give the urinary findings.

3. Describe carefully the condition of the arteries in arteriosclerosis and describe how the heart is affected by it.

4. What is the pathological condition in diabetes mellitus?

5. Describe carefully the appearance of the lung (macroscopical and microscopical) in acute lobar pneumonia.

6. Describe carefully the various steps in the formation of a tuberculous cavity in the lung.

7. What tissues are affected and in what manner are they affected in diphtheritic paralysis of the legs?

8. Describe the gross and minute appearance of the typical alcoholic liver.

9. Describe the lesions in acute cerebro-spinal meningitis (epidemic form).

10. Describe the pathological conditions present in exophthalmic goiter.

11. Describe the tissues affected and give the microscopical appearances of the blood in pernicious anemia.

12. What tissues are affected in rheumatoid arthritis? Describe the joint lesion.

BACTERIOLOGY.

Twelve questions; answer ten.

1. Define bacteria and classify them according to form, habitat, and oxygen requirements, describing each classification and giving examples.

2. Discuss microbic association. Give examples.

3. What is the chemical nature or composition of bacteria? What is a pathogenic germ? Toxicogenic?

4. Tell what you can of lactic acid fermentation—in the mouth, the stomach, in milk. Give its cause and the material acted upon.

5. What is necessary to demonstrate the causal relation of a microorganism to a given disease? (b) Give the four rules of Koch.

6. What are the water-borne diseases? How would you determine the presence of pathogenic bacteria in water? Distinguish between typhoid and colon bacilli.

7. A sample of sputum is brought to you. How would you determine the presence or absence of the tubercle bacillus? What is tuberculin?

8. What are toxins? Antitoxins? Distinguish between active and passive immunity. For what diseases are antitoxins known and used?

9. Tell all you can about diphtheria anti-

toxin. How is it made? How standardized?

10. Tell all you can about bubonic plague.

11. Describe Widal's reaction.

12. Give the principle for the Pasteur treatment for rabies.

GENERAL DIAGNOSIS.

Twelve questions; answer ten.

1. Differential diagnosis of intracapsular fracture and dorsal dislocation of head of femur.

2. Give in detail tests to determine the cause of coma in a patient whose history is unobtainable.

3. Give the symptoms and physical signs of aortic insufficiency in the stage of failing compensation.

4. Association of physical signs: (a) Solidification of pulmonary structure; percussion; auscultation of respiration; vocal fremitus. (c) Effusion into pleural sac; percussion; auscultation of respiration; vocal fremitus.

5. Give and define four pathognomonic symptoms of locomotor ataxia—how distinguish multiple neuritis from locomotor ataxia.

6. Define pemphigus; sycosis vulgaris; herpes zoster. A description of the eruption in each case is especially desired.

7. Causes and symptoms of decubital gangrene—how prevent?

8. Diagnose between tetanus, hysterical tetanus and strychnine poisoning.

9. In what lobe is almost always situated a cerebral abscess due to ear disease?

10. Give symptoms of cerebral abscess following empyema of the mastoid.

11. In abdominal operations it is frequently necessary that the large intestine be recognized with certainty or the small bowel be positively identified. Give differences.

12. How many forms of non-malignant stricture of the rectum? How far above the anus is usually situated a simple stricture?

GYNECOLOGY.

Twelve questions; answer ten.

1. Give differential diagnosis between appendicitis and right-sided adnexal inflammation.

2. Name varieties of fibroids, most frequent location of each, and diagnose from an unruptured ectopic gestation.

3. At what age does carcinoma of the cervix most frequently develop? Give prognosis, method of dissemination, and differential diagnosis from cervical erosion.

4. Name varieties of menstrual abnormalities. Describe and give etiology of each.

5. How is the uterus normally protected

from infection by pathogenic bacteria?

6. What is pelvic hematocoele? For what is it most likely to be mistaken? Give etiology and symptomatology.

7. What is vaginismus? Bartholinitis? Pyosalpinx? Coccygodynia? Hematometra?

8. Give distinguishing symptoms between a four months' pregnancy, a uterine fibroid and an ovarian cyst.

9. Describe normal menstruation and the changes that take place in the endometrium at that time.

10. What is subinvolution? And what are its chief etiological factors?

11. How would you distinguish between a case of amenorrhea, the menopause, or a three and one-half months' pregnancy?

12. Give symptoms and diagnosis of gonorrhea in the female. Why is it so serious in the female, and what are its sequelae?

OBSTETRICS.

Twelve questions; answer ten.

1. Name in order the things to be determined on visiting a patient supposed to be in labor?

2. Define the first, second and third stage of labor, and give the mechanism of breech presentation?

3. Give the definition of pseudocyesis and name other conditions from which to distinguish it, and give the differential diagnosis.

4. What is eclampsia, its frequency, time of occurrence, and effect on mother and child?

5. Define premature labor and abortion, naming the most constant causes of each in order of importance and frequency.

6. Describe fully the obstetric forceps and cranioclast, and name the indications for their use.

7. What do you understand by accidental concealed hemorrhage? Give the causes, symptoms and prognosis?

8. Define version, name the kinds, and tell when indicated.

9. What is puerperal infection? Give a clinical picture of a case, including causes, symptoms, and pathology?

10. Define hydatidiform mole and give symptoms, frequency, pathology, and prognosis.

11. Name and describe four of the most common abnormalities of the female pelvis?

12. Name conditions occurring during labor which jeopardize the life of the child.

HYGIENE.

Twelve questions; answer ten.

1. Name the food principles and state in what proportion they form a balanced

ration. Is there any one food which contains all the principles in the proper proportion? What is the effect of living upon a single article of food?

2. What is the chief cause of high infantile mortality? Give directions for the proper care of milk at the time of milking and until it is fed to the child. Are preservatives in milk ever justifiable? Why?

3. Why are patent medicines dangerous? What is the effect of alcohol taken in large amounts (a) upon the stomach; (b) upon the liver; (c) upon the susceptibility to disease; (d) upon the capacity for work; (e) upon the intellectual capacity?

4. What constitutes a safe and suitable drinking water? What are the best methods of purifying a water supply?

5. What are the best methods for the disposal of sewage? Garbage?

6. Give fully the hygienic measures for tuberculosis both for the care of the patient and for the protection of others.

7. What are the best means for the disinfection of rooms? Clothing? Hands? Sputum? Excreta? Dishes?

8. What constitutes air suitable for breathing? What are the chief impurities of bad air, and what are their effects? How much air space does the individual need?

9. Of the clothing fibers, which is best protection against sunlight? Against cold? Which is best for underclothing? For foot wear? Give reasons.

10. Discuss ventilation and heating of homes from standpoint of hygiene.

11. What are the requirements of a physician and others to prevent the spread of disease?

12. If you were a meat and food inspector what requirements would you make of the dealers in these things? Give reasons.

Tuberculous Disease of the Bones and Joints: Present Position of Treatment in London.

Elmslie (The London Lancet) points to the great prevalence of these conditions both in England and Germany, and gives statistical proof that in this country tuberculous disease of the bones and joints is the most important cause of crippling in childhood. The principles of treatment are (1) early diagnosis; (2) exact diagnosis, including routine radiography, so that the cases of focal disease in the bone capable of radical treatment may not be missed; (3) correction of any deformity that has already arisen; (4) rest and fixation in that position which will be the best if ankylosis supervenes; (5) the treatment of abscesses by means as conservative as possible, postponing operative treatment and using aspiration in preference to incision; (6)

after-treatment by fixation or support as long as is necessary to prevent subsequent contracture. The author gives a brief general survey of the means and channels by which such treatment is being at present carried out, and in conclusion he briefly states the requirements necessary for the better control of such cases. These are as follows: (1) increase in the accommodation for in-patient treatment of children suffering from tuberculous disease of the bones and joints, preferably in special hospitals situated in the country close to London; (2) the levelling up of these hospitals by having them staffed and supervised by men who will make a special study of the treatment of tuberculous joints, not only from the point of view of saving the child's life, but also from the point of view of preventing deformity; (3) the provision of extensive open-air wards; (4) provision for treatment for an indefinite period, and for children of all ages, including infants; (5) arrangement for the education of the children whilst in hospital; (6) proper arrangements for the after supervision in an out-patient department and in the home.—*British Journal of Children's Diseases*.

Röntgentherapy in Infantile Splenomegaly.

Petrone and Lo Re (La Pediatria) treated a number of cases by x-rays which failed to give good results in one case of Leishmaniosis and in one case of pseudo leukaemic splenic anaemia. During the treatment the size of the spleen and number of leucocytes diminished, but at the same time the general condition became worse and the anaemia more marked. Röntgentherapy, associated with the administration of quinine, gave very good results in a case of enormous malarial splenomegaly, in which the use of quinine and arsenic alone yielded very poor results. Under x-ray treatment carried on for three months, the spleen was reduced almost to its normal size, while the general health improved. At the same time, however, the leucopenia, the number of red blood corpuscles and amount of haemoglobin, after slight variations at the commencement of treatment, remained almost stationary, not only during the whole period of irradiation, but some months later. Eight months, however, after the termination of the Röntgentherapy the condition of blood returned almost to normal. The result observed in this case is all the more remarkable in that one had to do with a chronic splenomegaly, in which permanent irreducible lesions had presumably taken place. In four cases of pseudo-leukaemic splenic anaemia (three with leucocytosis and one with an almost normal quantity of white

blood-corpuscles), in which the enlargement of the spleen was a conspicuous feature, while the anaemic condition was little marked and the general condition fairly good, except in one case, the x rays was to a certain extent effectual, causing a rapid reduction in the size of the spleen, and improvement in the general condition. In these cases also a diminution of leucocytes was noticed. The red cells and haemoglobin remained almost stationary in three cases during treatment and for some months after, and only after a considerable time (seven to eight months) had the blood condition returned to normal, while in the other case the number of red cells and to a less degree the amount of haemoglobin underwent a gradual increase even during treatment. The authors conclude that this treatment is useful in pseudo leukaemic splenomegaly when it is not very severe, and when the general condition is fairly good, since it reduces the size of the spleen, improves the general health and conduces to recovery. The result in the case of malarial cachexia probably saved the patient from splenectomy. The results in the case of Leishmaniosis were not definite. The treatment should be continued with the hypodermic administration of iron, arsenic, and lecithin.—*British Journal of Children's Diseases*.

Chronic Jaundice and Splenomegaly.

Guthrie reports the case of a girl, aged 6 years, who eighteen months ago became jaundiced. Icterus has varied in intensity from time to time, but has never disappeared entirely. The urine is sometimes dark in color but usually pale, and the stools are said to be always dark brown. She often complains of feeling sick, but seems well on the whole. Past illnesses: Varicella and pertussis at 3 years, "rheumatic fever" at 5 years, and morbilli at 5½ years, followed by chorea. Has always been troubled with thread-worms. Family history: Parents, and brother and sister, aged 10 and 13 years, are in good health. No miscarriages. No children have died. Present condition: Fairly well nourished blonde. On admission to hospital, December 11, 1911, the skin, mucous membranes, and conjunctivae were of bright canary-yellow color. Bowels constipated, motions dark, containing much mucus, but no oxyurides. Urine pale, no bile pigment, acid, 1015, no albumin. Heart and lungs normal. Liver not felt, area of dullness normal. Spleen easily palpable, extending two inches below costal margin. Notch not felt. Blood examination: Serum is colored deep yellow. Reds, 4,190,000; whites, 10,200; hemoglobin, 80 per cent. Differential count:

Polymorphonuclears, 76 per cent.; large lymphocytes, 4.5 per cent.; small lymphocytes, 17 per cent.; eosinophiles, 2.5 per cent. During three months' observation, the icterus has varied greatly in intensity but has never quite disappeared. The stools are always dark, and the urine has never contained bile pigment. The spleen is still enlarged. The area of hepatic dullness is normal. The probable diagnosis is: Toxic hepatic cirrhosis with splenomegaly.—Proceedings of the Royal Society of Medicine.

Papilloma of the Trachea in a Woman.

Kelson reports the case of a married woman who gave no history of tuberculosis or syphilis. She stated that difficulty in breathing commenced a year ago, and that it became noisy three months ago, getting gradually worse. On examination it was found that the larynx was normal. At about one inch below the level of the cricoid cartilage and taking origin posteriorly from the tracheal wall a growth was seen. There was marked stridor, but no expectoration. No enlarged glands. Many rhonchi and other abnormal sounds were heard in the upper part of the chest, so that tuberculosis was suspected. The growth was removed by the direct method without tracheotomy under a general anaesthetic, with immediate relief to the breathing and the disappearance of the chest sounds. It appeared to be a papilloma.—Proceedings of the Royal Society of Medicine.

Hermaphroditism and Tumors of the Suprarenal Body.

Auvray (*Revue de gynéc. et de chir. abd.*) writes about a gynandroid or pseudo-hermaphrodite woman aged 72, who died of intestinal obstruction after refusing surgical aid. There was a uterine fibromyoma, weighing over 3½ lb.; it occupied the entire body of the uterus, and had pressed on the bowel at the pelvic brim. The vagina was very narrow and joined the urethra; the clitoris was peniform. The ovaries were atrophied, but traces of old corpora lutea were found in their stroma. The left suprarenal body was converted into a tumor, which seemed to be cystic, but proved to be a solid adeno-angeio lipoma. It was of the size of a cocoa nut. Auvray, after showing that many instances of uterine tumors in pseudo-hermaphrodites have been reported, further reminds the gynaecologist that hyperplastic tumors of the suprarenal body have been found co-existing with hermaphroditic malformations. No fewer than eight cases have been published within recent years. Apert in particular has recorded clinical evidence showing the dif-

ferent results of this coincidence according to the age of the subject. It is when the disease of the suprarenal body begins before birth in a female fetus that hermaphroditic changes develop in the genital tract itself. The uterus remains normal, at least above the cervix, but the external organs assume the male type, and a prostate can usually be distinguished. When the suprarenal disease does not appear till childhood, then puberty is premature. In adult life the advent of suprarenal hyperplasia is associated with the cessation of the catamenia and the growth of a beard; hair also appears all over parts naturally smooth. Adiposity is another complication. After the menopause extreme corpulence seems to be the only symptom, but clinical evidence of late hyperplasia of the suprarenal body is scanty. Glynn of Liverpool, Auvray adds, confirms Apert's views. Auvray finds that other tumors of the suprarenal body, such as blood cysts (*Proc. Roy. Soc. Med.*, vol. i, Surgical Section, and Treu, thesis, Jena, 1909) and malignant and tuberculous growths, bear no distinct relation to sexual peculiarities.—*Brit. Med. Jour.*

Tuberculin in Children.

Gourand (*Arch. de med. des enfants*) finds that the action of tuberculin in children is different from what it is in adults, though the benefit is similar; it requires more care in application. It is more useful in tuberculous glands than in phthisis; in the latter it is often badly borne. The results are very good in skin, joint and bone affections, also in tuberculous peritonitis and in genito-urinary tuberculosis. It may be used in infants so young as eight or ten months. It tends to promote active immunization, though the power of immunization is less the younger the child. As young children have been shown not to develop antibodies, tuberculin is chiefly useful when tuberculosis is limited and not virulent. Children bear tuberculin better than adults, so that the treatment may be considered as without danger. The improvement in the general condition, as shown by gain in weight and development, is very marked in infants. Surgery may be preferable in tuberculosis of glands, bones and joints, as the immunizing power of tuberculin is weak and the effect is slow.—*British Journal of Children's Diseases.*

The Southern Medical Association.

The following is the programme that will in all probability be carried out:

TUESDAY, NOVEMBER 12, 10 A. M.

Call to order by Chairman of Committee on Arrangements, J. D. Love, Jacksonville.
Invocation by Rev. Winder Shields.
Address of welcome for City of Jacksonville, Hon. W. S. Jordan, Mayor.

Address of welcome in behalf of the Duval County Medical Society and the Florida State Medical Association, W. S. Manning.

Response to addresses of welcome in behalf of the Southern Medical Association, Isadore Dyer, New Orleans, La.

Report of Committee on Arrangements, J. D. Love, Chairman.

President's Address, James M. Jackson, Miami, Fla.

Report of Vice Presidents.

Report of Councilors.

Report of Secretary-Treasurer.

Oration on Medicine, "Clinical Significance of the Nerves Supplying the Viscera and Their Relations to the Glands of Internal Secretion," Lewellys F. Barker, Baltimore, Md.

Oration on Surgery, "Surgery of the Thyroid Gland," Stuart McGuire, Richmond, Va.

Address, "Medical History in the South," Robert C. Wilson, Jr., Charleston, S. C.

Address, H. H. Martin, Savannah, Ga.

PUBLIC MEETING.

AUDITORIUM MOROCCO TEMPLE.

WEDNESDAY, NOVEMBER 13, 8 P. M.

Address, "The Profession of Medicine in Relation to the Public," Dr. J. A. Wither-
spoon, President of the American Medical Association, Nashville, Tenn.

Introductory Remarks on Plague, by Surgeon General Rupert Blue, United States Public Health Service, Washington, D. C.

Illustrated Lecture on Bubonic Plague by Assistant Surgeon General W. C. Rucker, United States Public Health Service, Washington, D. C.

Adjournment.

(Following the public meeting the members are invited to a banquet in the Banquet Hall of the Morocco Temple.)

Election of Officers and Business Meeting, Auditorium Morocco Temple, Thursday, November 14, 11 a. m.

SECTION ON MEDICINE.

(Meets in Auditorium of Morocco Temple, Newnan and Monroe Streets.)

OFFICERS OF SECTION.

Chairman, C. C. Bass, New Orleans, La.
Vice-Chairman, G. E. Henson, Crescent City, Fla.

Secretary, H. E. Mitchell, Birmingham, Alabama.

Stenographer, Wm. Whitford, Chicago.

TUESDAY, NOVEMBER 12, 2:00 P. M.

Chairman's Address, "Successful Cultivation of the Malarial Parasites," C. C. Bass, New Orleans, La.

"The Diagnosis of Malaria," Graham E. Henson, Jacksonville, Fla.

"Preliminary Studies of Malaria in Alabama," R. H. Von Ezdorf, Mobile, Ala.

"Some Suggestions for a Campaign Against Malaria," William H. Deaderick, Marianna, Ark.

"Experimental Bearing on the Etiology of Beri Beri," Creighton Wellman, New Orleans, La.

"Compelling Health," Robert Carroll, Asheville, N. C.

"The Roentgen Diagnosis of Intra-Thoracic Lesions," A. L. Gray, Richmond, Va.

"Complement Fixation in Pellagra," C. H. Lavinder, Savannah, Ga.

"Hydrothorax in Its Relation to Cardio-Renal Lesions," Frank A. Jones, Memphis, Tenn.

"Neurasthenia, Symptomatology and Pathogenesis," James H. Randolph, Jacksonville, Fla.

WEDNESDAY, NOVEMBER 13, 9:00 A. M.

"The Present Status of Our Knowledge Regarding Parasitic Amebae," Charles F. Craig, Capt. U. S. A., Washington, D. C.

"Stereopticon Demonstration of the Different Species of Amebae Reported Pathogenic for Man," C. W. Stiles, Washington, D. C.

"Diagnosis and Treatment of Amebic Dysentery," E. M. Mason, Birmingham, Alabama.

"Field Work in Tuberculosis," Mary E. Lapham, Highlands, N. C.

"Phthisiogenesis," E. C. Thrash, Atlanta, Georgia.

"The Early Recognition of Tuberculosis Considered Especially with Reference to Its Confusion with Malaria," W. R. Kirk, Hendersonville, N. C.

"The Clinical Value of the Tuberculin in the Diagnosis and Treatment of Tuberculosis," Wallace J. Durel, New Orleans, La.

"Tuberculosis," L. B. Morse, Hendersonville, N. C.

"Tuberculosis," William LeRoy Dunn, Asheville, N. C.

"Immunity," J. E. Paullin, Atlanta, Ga.

"Serum Treatment in Cerebro-Spinal

Meningitis," C. C. Green, Houston, Tex.

"Some Important Phases Pertaining to the Care of Infancy," I. W. Faison, Charlotte, N. C.

SYMPOSIUM ON SYPHILIS.

WEDNESDAY, NOVEMBER 13, 2:00 P. M.

"Some Economic Questions Related to Syphilis," Isadore Dyer, New Orleans, La.

"Importance of the Recognition of Syphilis in Circulatory Diseases," J. T. Halsey, New Orleans, La.

"The Effect of Antisyphilitic Remedies on the Wassermann Reaction," William Litterer, Nashville, Tenn.

"Gumma of the Urethra, with Report of Two Cases," W. P. Day and J. L. Kirby-Smith, Jacksonville, Fla.

"The Hygienic Phase of Syphilis," Oscar Dowling, New Orleans, La.

"The Treatment of Syphilis with Arsenical Preparations," Abner Cook, Hot Springs, Ark.

"Salvarsan in the Treatment of Syphilis and Pellagra," E. H. Martin, Hot Springs, Arkansas.

"Report of 700 Administrations of Salvarsan," W. L. Champion, Atlanta, Ga.

"Syphilis of the Eye," Dunbar Roy, Atlanta, Ga.

"Syphilis of the Nose-Throat," H. H. Martin, Savannah, Ga.

"Syphilis of the Ear," H. M. Heggies, Jacksonville, Fla.

THURSDAY, NOVEMBER 14, 9:00 A. M.

"Some Mooted Points on the Feeding of Infants," James Love, Jacksonville, Fla.

"The Influence of Bromides on Pyelonephritis and Cystitis," E. Bates Block, Atlanta, Ga.

"Anaphylaxis," Katherine Collins, Atlanta, Ga.

"Anaphylaxis in Children," J. Boss Snyder, Birmingham, Ala.

"The Importance of the Examination of Urine in Infancy and Early Childhood," W. W. Butterworth, New Orleans, La.

"Pyelitis in Infancy," D. T. McCall, Mobile, Ala.

"Pediatrics," William Weston, Columbia, S. C.

SYMPOSIUM ON PLAGUE.

THURSDAY, NOVEMBER 14, 2:00 P. M.

"Epidemiology of Plague from the Viewpoint of the Southern States," Howard King, New Orleans, La.

"Symptomatology and Clinical Diagnosis of Plague," J. B. Guthrie, New Orleans, La.

"The Diagnosis of Plague," R. L. Wilson, Past Assistant Surgeon, U. S. P. H. &

M. H. S., Charleston, S. C.

"Treatment of Plague," I. I. Lemann, New Orleans, La.

THURSDAY, NOVEMBER 14, 7:30 P. M.

"The Diseases of Christopher Columbus and the Part Taken by the Medical Profession in the Discovery of America," Fernandez de Yborro, Tampa, Fla.

"The Renal Functional Test in Medicine," Stewart R. Roberts, Atlanta, Ga.

"State Regulation of Expert Testimony," Cheston King, Atlanta, Ga.

"Aspiration as a Diagnostic Method in Certain Medical Diseases," Alexander G. Brown, Richmond, Va.

"The Relation of Blood Pressure to Certain Functional Nervous Diseases," Hansell Crenshaw, Atlanta, Ga.

"Intravenous Injections of Strophanthin in Cardiac Insufficiency," Thomas Truelsen, Tampa, Fla.

"Syringo-Myelia, with Report of a Case," Sidney Leach and Alston Maxwell, Tuscaloosa, Ala.

"The Medical versus the Surgical Aspect of Nephritis," J. E. Dedman, Birmingham, Alabama.

"Mycosis Fungoides in Negress," Bernard Wolff, Atlanta, Ga.

"A Therapeutic Comparison, Medicinal and Otherwise, as Between the Caucasian and the Afro-American," George M. Niles, Atlanta, Ga.

"Influence of Physical Defects on Personalities, Moral Obliquities, and Crime," G. H. Benton, Mine Run, Va.

SECTION ON SURGERY.

(Meets in Board of Trade Building, Main and Adams Streets.)

OFFICERS OF SECTION.

Chairman, H. T. Inge, Mobile, Ala.

Vice Chairman, W. A. Bryan, Nashville, Tenn.

Secretary, Hermann Gessner, New Orleans, La.

Stenographer, Miss Ida Lamb, Charlotte, N. C.

TUESDAY, NOVEMBER 12, 2:00 P. M.

Chairman's Address, H. T. Inge, Mobile, Ala.

"Some Modern Factors of Safety in Surgery," J. Shelton Horsley, Richmond, Va.

"Demonstration of Intra-Thoracic Surgery," Carroll W. Allen, New Orleans, La.

"Ulcers of Stomach and Duodenum," P. C. Perry, Jacksonville, Fla.

"The Discrepancy Between Clinical and Postmortem Findings in Cancer of the Stomach," W. A. Bryan, Nashville, Tenn.

"Clinical Notes on Uterine Hemorrhage," H. A. Royster, Raleigh, N. C.
 "Unique Cases of Vicarious Menstruation Following Mutilating Operations," W. R. McKinley, Columbus, Miss.
 "Rare Tumors of the Abdominal Wall," Charles Reese, Charleston, S. C.
 "A Few Surgical Complications in the Abdomen in Typhoid Fever," Charles M. Remsen, Atlanta, Ga.

Orleans, La.

"Climate a Potent Factor in Surgical Tuberculosis," M. O. Shivers, Colorado Springs, Colo.

"The Management of Fractures of the Elbow," Isadore Cohn, New Orleans, La.

"The Use of the Head-piece Plaster Jacket in the Treatment of Tubercular Spines; Illustrated with Lantern Slides," E. Lawrence Scott, Birmingham, Ala.

TUESDAY, NOVEMBER 12, 8:00 P. M.

Entertainment by Board of Trade.

WEDNESDAY, NOVEMBER 13, 9:00 A. M.

"Intraperitoneal Hemorrhage from the Ovary," H. B. Gessner, New Orleans, La.

"The Surgical Treatment of Infection of the Peritoneum with Especial Reference to the Immediate Sterilization of the Same," J. A. Crisler, Memphis, Tenn.

"Intestinal Suture; An Analysis of Methods," R. C. Turck, Jacksonville, Fla.

"Migratory Tumors," C. O. Kepler, Boston, Mass.

"Treatment of Cancer from a Surgical Standpoint," J. C. Willis, Shreveport, La.

"The Prevention of Abdominal Hernia," W. T. Henderson, Mobile, Ala.

"A New and Original Method for the Treatment of Suppression of Urine," George R. Livermore, Memphis, Tenn.

"The Etiology and Treatment of Cystitis in Women," R. Webb Griffith, Asheville, N. C.

"Observations on Intestinal Obstruction," W. D. Haggard, Nashville, Tenn.

"Drainage Sequent to Certain Surgical Procedures," James N. Ellis, Atlanta, Ga.

WEDNESDAY, NOVEMBER 13, 2:00 P. M.

Symposium on Syphilis with Section on Medicine.

WEDNESDAY, NOVEMBER 13, 8:00 P. M.

Public meeting followed by banquet in Morocco Temple.

THURSDAY, NOVEMBER 14, 9:00 A. M.

"Operative Treatment of Fractures," Joseph Graham, Durham, N. C.

"The Operative vs. the Non-Operative Treatment of Fractures," G. J. Winthrop, Mobile, Ala.

"Cases Illustrating Arthoplastic and Bone Plastic Surgery," Michael Hoke, Atlanta, Ga.

"Bone Transplantation with Report of Case Presenting Some Difficulty," John Smyth, New Orleans, La.

"Congenital Dislocation of the Hip," W. C. Campbell, Memphis, Tenn.

"Tuberculous Joints," L. Sexton, New

THURSDAY, NOVEMBER 14, 2:00 P. M.

Symposium on Syphilis with Section on Medicine.

THURSDAY, NOVEMBER 14, 8:00 P. M.

"Traumatism of the Urinary Tract," Howard Williams, Macon, Ga.

"The Operative Treatment of Diseases of the Thyroid Gland," Gaston Torrance, Birmingham, Ala.

"Present Status of the Treatment of Goiter," LeGrand Guerry, Columbia, S. C.

"The Surgical Treatment of Goiter, with Report of Cases," G. E. Gavin, Mobile, Ala.

"The Surgical Importance of the Breast," E. Denegre Martin, New Orleans, La.

"The Value of the Roentgen Rays in Surgical Diagnosis," Amedee Granger, New Orleans, La.

"Recent Surgery," W. R. Jackson, Mobile, Ala.

"Iodine Not Receiving the Proper Recognition," H. A. Elkourie, Birmingham, Ala.

"The Diagnosis and Treatment of Ectopic Gestation," R. J. McFall, Erin, Tenn.

"Cesarean Section," John M. Wilson, Mobile, Ala.

"Uterine Fibroids with Complications," E. C. Davis, Atlanta, Ga.

—, C. J. Miller, New Orleans, La.

—, J. D. Martin, New Orleans, La.

—, W. D. Travis, Covington, Ga.

—, H. McKee Tucker, Raleigh, N. C.

SECTION ON OPHTHALMOLOGY.

(Meets in Board of Trade Building.)

OFFICERS OF SECTION.

Chairman, M. Feingold, New Orleans, Louisiana.

Vice-Chairman, U. Sr Bird, Tampa, Fla.

Secretary, Homer Dupuy, New Orleans, Louisiana.

Stenographer, Miss Lula Gay, Philadelphia.

Tuesday, November 12, 2:00 p. m.

Chairman's Address, "Thrombo-Phlebitis of Orbitis by Ozena Bacillus Death," M. Feingold, New Orleans, La.

"Gangrenous Tonsil," U. S. Bird, Tampa, Fla.

"Sympathetic Ophthalmia," J. O. McReynolds, Dallas, Texas.

"Tamponade Treatment of Accessory Sinus and Its Effect on Intra-Ocular Inflammation," William S. Manning, Jacksonville, Fla.

"Prevention and Cure of Deafmutism," M. M. Stapler, Macon, Ga.

"Observations on Borthen's Operation for Chronic Glaucoma," Dunbar Roy, Atlanta, Ga.

"Chronic Nasal Diphtheria" (prepared as a candidate's thesis to the American L. R. and O. Society), Clifton M. Miller, Richmond, Va.

Wednesday, November 13, 9:00 a. m.

"Chronic Laryngeal Stenosis in Children: Its Treatment by the Author's Special Intubation Tubes," Homer DuPuy, New Orleans, La.

"The Report of Two Unusual Cases of Nasal Polyp, Occurring in Sisters, with the Report of Operation," C. W. Kollock, Charleston, S. C.

"Nail Occluding Third Bronchial Ramus; Upper Bronchoscopy, Recovery," J. W. Jerve, Greenville, S. C.

"Nasal and Post-Nasal Obstructions," C. A. Barber, Jackson, Miss.

"Intra-Nasal Deformities with Their Attendant Sequela," C. B. Wylie, Chattanooga, Tenn.

—, M. M. Cullom, Nashville, Tenn.

"Exhibition of Pathological Specimens and Paintings," M. Feingold, New Orleans, La.

—, E. M. Whaley, Columbia, S. C.

Intestinal Torpor.

Few ailments coming within the daily notice of medical men are more difficult to correct than the constipation that afflicts those of sedentary or lethargic habits. These patients are usually heavy eaters and engaged in pursuits that too often require excessive mental effort and a minimum of physical exercise. While at first, little or no discomfort may be felt, as time goes on, the depressing influence on all physiologic processes produces more or less derangement of the metabolism, and faulty elimination dams back into the system poisons that work still greater mischief. Soon these patients become confirmed "toxemics" from the constant autointoxication that results from the retention of perverted and waste products. All manner of symptoms appear, the nervous system particularly showing the greatest variety ranging from simple neurasthenia to the gravest types of melancholia. Indeed, the opinion is growing that defective elimination of bodily wastes is one of the most important factors in the development of many of the mental as well

as nervous disorders, that are apparently on the increase.

The great importance, therefore, of preventing waste accumulation by clearing out the avenues of elimination cannot be overestimated.

Among the means that scientific study and research have brought forward for bowel elimination, Prunoids certainly hold a unique place. This remedy presents advantages that will appeal at once to both patient and physician. Although exceedingly active, Prunoids never set up undue peristalsis; nor do they ever exert a harsh drastic action on the intestinal mucous membrane. Gripping, pain and discomfort are conspicuous by their absence and the effects produced are mild, pleasant but very complete and satisfying. In fact, no other cathartic or purgative at the command of the profession produces more complete and perfect evacuation of the bowels, with less discomfort and distress. The reason for this is evident as the action of Prunoids is studied. Their whole influence is physiological, that is, they act by increasing and promoting natural processes, never by supplanting them. With this so true, it is not surprising that Prunoids never give rise to reactionary constipation, as is the case with most other laxative remedies. Used properly for a reasonable period, Prunoids may be relied upon to restore the bowel functions, overcome constipation and afford pronounced relief from intestinal auto-toxemia.

Pepsin is undoubtedly one of the most valuable digestive agents of our *Materia Medica*, provided a good article is used. "Robinson's Lime Juice and Pepsin" (see page xiv this number) we can recommend as possessing merit of high order.

The fact that the manufacturers of this palatable preparation use the purest and best Pepsin, and that every lot made by them is carefully tested before offering for sale, is a guarantee to the physician that he will certainly obtain the good results he expects from Pepsin.

Abortive Treatment of Colds.

Cystogen-Aperient, two to three teaspoonfuls to a large glass of water, repeated every four hours, will usually abort a cold if taken as soon as the first symptoms (sneezing, "stiffness," etc.), are observed. After free laxative action has been obtained, Cystogen-lithia or Cystogen in powder or tablets can be substituted for the aperient form. Cystogen, in full doses, enters all of the fluids of the body and its use in the treatment of acute and chronic rhinitis, otitis media, bronchitis, etc., is as logical as the established practice of prescribing it where genito-urinary antiseptics is indicated.

WHEN NATURE FALTERS

and from over work, worry or other depressing causes, a worn out, tired body is unable to perform its manifold functions,

GRAY'S GLYCERINE TONIC COMP.

may be confidently relied upon to stimulate the appetite, promote digestion, increase assimilation, and not only restore functional vigor, but also build up the whole organism.

Unlike cod-liver oil and many other reconstructive tonics, "Gray's" has no contra-indication of season or age. Consequently, it can be freely administered all the year round—and to patients however young or aged.

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Listerine is an efficient, non-toxic antiseptic of accurately determined and uniform antiseptic power, prepared in a form convenient for immediate use.

Composed of volatile and non-volatile substances, Listerine is a balsamic antiseptic, refreshing in its application, lasting in its effect.

Listerine is particularly useful in the treatment of abnormal conditions of the mucosa, and admirably suited for a wash, gargle or douche in catarrhal conditions of the nose and throat.

In proper dilution, Listerine may be freely and continuously used without prejudicial effect, either by injection or spray, in all the natural cavities of the body.

Administered internally, Listerine is promptly effective in arresting the excessive fermentation of the contents of the stomach.

In the treatment of summer complaints of infants and children, Listerine is extensively prescribed in doses of 10 drops to a teaspoonful.

In febrile conditions, nothing is comparable to Listerine as a mouth wash; two or three drachms to four ounces of water.

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Virginia State Medical Society Meeting.

On October 22-25 the physicians and surgeons of Virginia met in Norfolk for their forty-third annual session.

The convention opened with an address of welcome by Mayor Mayo, who was presented by Dr. Hugh M. Taylor, of Richmond, president of the association. Dr. A. B. Greiner, of Rural Retreat, Va., made the response which was followed by President Taylor's annual address.

The meetings were held at the Monticello Hotel.

The following programme was followed:

TUESDAY OCT. 22d, 1912, 8 P. M.

Report of the Executive Council.
Report of Committee on Election of Officers.
Report of Judiciary Committee.
Report of Legislative Committee.
Report of Necrological Committee.
Report of the Delegates to the American Medical Association.

Report of Treasurer; Report of Secretary.
Address—In Memoriam Dr. Rawley W. Martin, Dr. Samuel Lile, Lynchburg, Va.

Address—The Rawley W. Martin Memorial Association, Dr. R. S. Martin, Stuart, Va.

WEDNESDAY, OCT. 23, 1912.

to A. M. Report of Clinical Cases. (Five minutes for each report). Subject for discussion:

GASTRIC AND DUODENAL ULCER.

(a) Clinical Manifestations and Diagnosis—Dr. J. S. Davis, University of Va.

(b) Medical Treatment—Dr. J. G. Nelson, Richmond, Va.

(c) Surgical Treatment—Dr. Lomax Gwathmey, Norfolk, Va.

PAPERS.

Pyloric Ulcer, Secondary to Appendicitis, Colitis, and other Foci of Infection within the Portal Area, Dr. G. Paul LaRoque, Richmond, Va.

Registration and Functions of the Medical Examining Board of Virginia, Dr. Herbert Old, Norfolk, Va.

Old and Modern Theories of Fetal Development, with Report of a Case of a Boy with Three Lgs, Dr. Stuart McGuire, Richmond, Va.

A Plea for More Careful Work among Country Physicians, Dr. A. M. Burfoot, Fentress, Va.

Some Remarks on Obstetrics with Report of Cases, Dr. W. C. Powell, Petersburg, Va.

Symposium, Occipito-Posterior Cases.

(a) Cause and Frequency—Dr. T. D. Jones, Richmond, Va.

(b) Treatment—Dr. M. L. Anderson, Richmond, Va.

(c) Protection and Repair of the Perineum—Dr. Greer Baughman, Richmond, Va.

Indications for Caesarean Section, Dr. Virginius Harrison, Richmond, Va.

Caesarean Section, Dr. M. D. Delaney, Alexandria, Va.

Myoma and Pregnancy—The Therapeutical Indications, Dr. George T. Harrison, Charlottesville, Va.

Dermoid Cysts of the Ovaries, with Re-

port of Cases, Dr. Lewis C. Morris, Invited Guest, Birmingham, Ala.

Treatment of Fracture of the Femur, Hon. Mem. Dr. A. R. Shands, Washington, D. C.

Meeting of State Public Health Association.

Annual meeting of Executive Council at 8. p. m. THURSDAY, OCT. 24th.

Pancreatic Cysts, Dr. R. C. Bryan, Richmond, Va.

Some Factors of Safety in Operations for Tumors, Dr. J. S. Horsley, Richmond, Va.

The Surgical Treatment of Retro-Calcanean Bursitis (Alberts Disease), Dr. Chas. A. White, Washington, D. C.

Observations in One Thousand Consecutive Cases of Appendicitis, Dr. Murat Willis, Richmond, Va.

Nitrous Oxide-Oxygen—Reply to Critics, Drs. Southgate Leigh and J. R. Culpepper, Norfolk, Va.

The Cause of Death in Intestinal Obstruction—an Experimental Study, Dr. Harvey B. Stone, Baltimore, Md.

Appendix Abscess Opening into the Urinary Tract, Dr. C. L. Andrews, Roanoke, Va.

Tuberculosis of the Urinary System in Women, Dr. E. H. Richardson, Fraternal Delegate, Baltimore, Md.

Some Suggestions in the Treatment of Chronic Urethritis, Dr. Thomas V. Williamson, Norfolk, Va.

Vasectomy from the Eugenical standpoint, with Report of Cases, Dr. Chas. V. Carrington, Richmond, Va.

Feeble minded children, Dr. L. S. Foster, Norfolk, Va.

Report of Executive Council, Election of Officers, Committee, etc.

Present Menace to the Country of the Bubonic Plague, Dr. Hugh S. Cumming, Fort Monroe, Va.

SYMPOSIUM PELLAGRA.

(a) Pathogenesis and Clinical Types—Dr. A. G. Brown, Richmond, Va.

(b) Nervous Manifestations—Dr. B. R. Tucker, Richmond, Va.

(c) Skin Symptoms and Treatment—Dr. T. W. Murrell, Richmond, Va.

The Value of Nitrate of Silver in Pellagra, Dr. R. B. James, Danville, Va.

The Control of Typhoid Cases in Cities and Towns, Drs. C. R. Grandy and C. J. Andrews, Norfolk, Va.

Mastoiditis with Observations on One Hundred and Fifty Personal Cases, Drs. R. H. Wright and S. C. Bowen, Richmond, Va.

Use of the Electro-Magnet in Penetrating Injuries to the Eye, Dr. W. F. Mercer, Richmond, Va.

Eye Stain, Dr. Thos. F. Staley Bristol, Va.

Is the Present Immolation of the Tonsil Justifiable, Dr. J. A. White, Richmond, Va.

Intestinal Stasis, with Treatment and

Results, Drs. J. N. Upshur and J. S. Horsley, Richmond, Va.

Ducdenal Feeding, Invited Guest, Dr. W. G. Morgan, Washington, D. C.

Gastro-Intestinal Diagnosis, Dr. Henry K. Pancoast, Philadelphia, Pa.

Colonic Intoxication, It's Relation to Rectal Diseases, Dr. E. H. Terrell, Richmond, Va.

Some Aspects of Immunity of Interest to the Physician, Dr. E. C. L. Miller Richmond, Va. FRIDAY, OCT. 25th.

Common Error in Neurological Diagnosis and Therapeutics, Dr. Tom A. Williams, Washington, D. C.

The Importance of Mental Hygiene in the Young, Dr. Paul V. Anderson, Richmond, Va.

A Cursory Review Touching the Practical Value of Blood Pressure Estimation, Dr. J. W. Preston, Roanoke, Va.

Blood Pressure Variations and Treatment of Hypertension, Dr. J. D. Willis, Roanoke, Va.

A Plea for the Sanatorium Treatment of Tuberculosis, Drs. J. J. Lloyd and B. L. Taliaferro, Catawba Sanatorium, Va.

A Retrospect, Dr. W. H. Barham, New-some, Va.

Syphilis and Its Treatment, with Further Report of Cases Treated with "606," Dr. M. C. Syle, Richmond, Va.

Some Remarks on Syphilis and its Treatment in Relation to the Wassermann Test. Drs. E. P. McGavock and R. S. Preston, Richmond, Va.

Prevention of marriage among feeble minded persons can alone empty Virginia's penitentiary, jails and institutions of mental delinquents, according to Dr. L. S. Foster, a Norfolk physician, before the Medical Society of Virginia. He recommended sterilization of defectives as a preliminary measure. That his views met with general approbation was evidenced by a resolution adopted that his paper and that of Dr. Charles V. Carrington, Richmond, along the same line, be distributed for publication by the press of the State.

WHAT CAUSES PELLAGRA?

"Symptoms of Pellagra," was treated in two papers at this meeting. They were read by Dr. B. R. Tucker, Richmond, and Dr. T. W. Murrell, Richmond. Dr. Tucker leans to the theory of Dr. Babcock, the famous pellagra expert, who believes the disease is caused by a mononous diet and that it is close akin to scurvy and beriberi. Dr. Murrell frankly confessed that he did not know the cause.

Reappearance of the disease when it is apparently cured was discussed and different cures came in for criticism. The maize theory of contraction seems to have lost ground, according to Dr. Tucker, al-

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though other physicians did not agree with him, clinging to the damaged corn or cereal theory.

Many doctors assert the disease is cured when all they know is that the symptoms are absent.

Not only did the local and visiting physicians in attendance at this meeting receive benefit from the regular "professional sessions" but also received much pleasure from the social side of the meeting for a splended program of entertainment was arranged for the visitors by the local committee. It included a reception at the Country Club on Oct. 23rd., from 10 to 12, tendered by Dr. Southgate Leigh, and on the afternoon of the 24th the visitors were the guests of the physicians at the Naval Hospital across the river and on the 25th an oyster roast was held at Cape Henry. Besides there was a number of small receptions and dinner parties during the week.

The next meeting will be held in Lynchburg in October, 1913.

OFFICERS ELECTED.

President—Dr. Southgate Leigh, Norfolk.

First vice-president—Dr. H. S. McLean, Richmond.

Second vice-president—Dr. M. M. Pearson, Bristol.

Treasurer—Dr. Mark Peyster, Richmond.

Secretary—Dr. Paullus Irving, Farmville.

With these prominent physicians at the head of this organization will mean a most helpful meeting for next year.

A Dependable Bromide Preparation.

"Why is it," asks a physician of high standing, "that I get results from the use of Peacock's Bromides that I never can from ordinary extemporaneous preparations of potassium or sodium bromide? As a matter of fact, I find that I can produce sleep and accomplish sedation with surprisingly small doses of Peacock's Bromides and never encounter any ill effect. What makes this product so effective?"

The explanation is very simple one.

The bromides in Peacock's Bromides are made especially for the product and salts of their high purity are not found in the open market. The imitations of this preparation, therefore do not imitate, except in physical properties, for ordinary preparations have to be made from inferior salts. A trial consequently never fails to demonstrate a difference between its action, and that of substitute or extemporaneous preparations. Thus, an eminent neurologist writes: "I am convinced that Peacock's Bromides is the purest preparation to be had, and moreover, that it gives most satisfactory results and is attended with fewer symptoms of bromism than any other with which I am familiar. I have used it extensively in neuroses during my connection with the State Asylum for the Insane, as well as in my private practice, and in the Clinic of the University, and am, perhaps, fairly well qualified to pass judgment."

The Influence of the Chemist on Modern Therapeutics.

One of the advances of modern chemistry has been to show that cod liver oil possesses much more virtue than merely as a convenient means of administering fat to the patient. With a clearer understanding of its chemical construction has come a more just appreciation of the large therapeutic value of its essential qualities. Before modern chemistry had succeeded in isolating the active principles of cod liver oil, the patient whose stomach was unequal to the difficult task (a difficult task even to the normal organ) of digesting a greasy mass, was of necessity denied the advantages of this valuable agent. Unfortunately this was too often the case because the very patient who needed cod liver oil was possessed of a defective gastric organ. It was not until the pharmaceutical chemist made a practical use of his more theoretical colleague's investigations that a preparation of cod liver oil was secured which was freer from fat and which was capable of being digested by the impaired stomach. The most popular of such cod liver oil preparations is easily Cord. Ext. Ol. Morrhuæ

Comp. (Hagee) which contains in palatable form the active principles of the oil, and by means of which the patient may enjoy the therapeutic advantages of the whole oil and yet be spared the distress inevitable upon taking the whole oil. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) has for many years been put to the severest tests, and no stronger argument in favor of its clinical value may be advanced than that those who have used it longest use it the most.—Therapeutic Review.

Conference of State Secretaries.

One of the most important meetings since the reorganization of the American Medical Association at St. Paul, in 1901, was the Conference of the Secretaries of State Societies, called by the Committee on Uniform Regulation of Membership at the Association headquarters, Chicago, October 23 and 24. This committee was appointed in 1908, in accordance with a recommendation made in the Secretary's report for that year. At the Atlantic City session, last June, the committee summarized its reports for the last four years, and recommended that a conference of State secretaries be authorized to consider the entire question of membership conditions in the county, State and National organizations. This recommendation was referred to the Board of Trustees and a conference between the committee and the State secretaries was authorized by the Board of Trustees, to be held at the same time as the October meeting of the board. Appropriations were made for paying the expenses of all State Secretaries who attended the meeting. The conference was called to order at 10:30 a. m., Wednesday, October 23, at the Association building in Chicago, by Dr. Thomas McDavitt, Secretary of the Minnesota State Medical Association and Chairman of the Committee on Uniform Regulation of Membership.

THE ATTENDANCE.

Thirty-eight States were represented, the roll showing the following in attendance: Dr. W. W. Watkins, Phoenix, Arizona. Dr. C. P. Meriwether, Little Rock, Ark. Dr. Philip Mills Jones, San Francisco, California.

Dr. G. W. K. Forrest, Wilmington, Del.
Dr. W. C. Lyle, Augusta, Ga.
Dr. E. E. Maxey, Boise, Ida.
Dr. E. W. Weis, Ottawa, Ill.
Dr. Charles N. Combs, Terre Haute, Ind.
Dr. J. W. Osborn, Des Moines, Iowa.
Dr. L. R. DeBays, New Orleans, La.
Dr. W. B. Moulton, Portland, Maine.
Dr. W. S. Gardner, Baltimore, Md.
Dr. H. D. Arnold, Boston, Mass.

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Dr. Wilfrid Haughey, Battle Creek, Mich.
 Dr. Thomas McDavitt, St. Paul, Minn.
 Dr. E. F. Howard, Vicksburg, Miss.
 Dr. E. J. Goodwin, St. Louis, Mo.
 Dr. H. D. Kistler, Butte, Mont.
 Dr. Joseph M. Aikin, Omaha, Neb.
 Dr. Martin A. Robison, Reno, Nev.
 Dr. D. E. Sullivan, Concord, N. H.
 Dr. Thomas N. Gray, East Orange, N. J.
 Dr. R. E. McBride, Las Cruces, N. Mex.
 Dr. John A. Ferrell, Raleigh, N. C.
 Dr. H. J. Rowe, Casselton, N. Dak.
 Dr. J. H. Upham, Columbus, Ohio.
 Dr. Claude A. Thompson, Muskogee,
 Oklahoma

Dr. M. B. Marcellus, Portland, Ore.
 Dr. C. L. Stevens, Athens, Pa.
 Dr. J. Perkins, Providence, R. I.
 Dr. Edgar A. Hines, Seneca, S. C.
 Dr. Perry Bromberg, Nashville, Tenn.
 Dr. H. Taylor, Fort Worth, Texas.
 Dr. W. B. Ewing, Salt Lake City, Utah.
 Dr. C. H. Beecher, Burlington, Vt.
 Dr. Grant Calhoun, Seattle, Wash.
 Dr. Charles S. Sheldon, Madison, Wis.
 Dr. W. H. Roberts, Sheridan, Wyo.

No representatives were sent from Alabama, Colorado, Connecticut, District of Columbia, Florida, Kansas, Kentucky, New York, South Dakota, Virginia and West Virginia. No effort was made to secure the attendance of the Secretaries of the Hawaiian Territorial Medical Society, Medical Association of the Isthmian Canal Zone or the Philippine Islands Medical Society, as these Secretaries were too far removed from the place of meeting to make it possible for them to attend.

THE PROGRAM.

The following program was carried out:

1. Call to order, Dr. Thomas McDavitt.
2. History and Development of Membership in the American Medical Association and Its Component Parts, Dr. F. R. Green.
3. Some of the Difficulties of the Present Situation, Dr. A. R. Craig.
4. Remedies Proposed by the Committee, Dr. Thomas McDavitt.

DISCUSSION.

A general discussion of membership regulation was conducted under the following heads:

1. Fiscal Year. Should the fiscal year coincide with the calendar year? Should the fiscal year be the same in all County and State Societies?
2. Should membership expire automatically at the end of the calendar year, and a new roster for each County and State Society be made with the beginning of each year?
3. When should membership reports from

County Secretaries to State Secretaries be due?

4. Should the dues of new members, joining after the first of the year, be prorated for the remainder of the year?

5. Should an admission fee be required in addition to the annual dues?

6. Should uniform application blanks, receipt blanks, and membership and transfer cards be adopted?

7. Should constituent State Associations hold charters from the American Medical Association?

8. Should a uniform plan for the transfer of members be adopted?

In addition to the above Dr. George H. Simmons, editor and general manager, discussed the question of membership in the American Medical Association, and the changes in name proposed by the Board of Trustees.

REPORT OF THE COMMITTEE ON RECOMMENDATIONS.

After two days' discussion it was evident that the Secretaries present were agreed as to the advisability of a uniform fiscal year for all parts of the organization, to coincide with the calendar year, and that they favored the expiration of membership at the end of each year and a complete revision of the membership rolls at the beginning of each year. The committee on recommendations, consisting of Dr. E. J. Goodwin, Missouri State Medical Association; Dr. Wilfrid Haughey, Michigan State Medical Society; Dr. Perry Bromberg, Tennessee State Medical Association; Dr. William S. Gardner, Medical and Chirurgical Faculty of Maryland, and Dr. F. R. Green, Secretary of the Committee and of the Council on Health and Public Instruction, brought in a report recommending the adoption of provisions on these two points, and that all other points be deferred for further consideration. The report of the committee follows:

The Committee on Recommendations herewith submits the following report:

1. We recommend that this conference endorse the plan of having the fiscal year coincide with the calendar year in all parts of the organization. We further recommend that Secretaries of all State Associations which have not already adopted this provision bring this matter to the attention of their associations and recommend its adoption.

2. We recommend that constituent State Associations adopt provisions making dues in component Societies payable on January 1 of each year, and requiring county Secretaries to report to State Secretaries all members in good standing, together with their

per capita assessment for the current year not later than March 31. State Societies desiring to do so may provide a shorter period.

3. The recommendation regarding the third question under discussion is covered by our recommendation of the second.

4. Regarding the prorating of dues, we recommend that this be made optional with each component Society.

5. Regarding an admission fee for membership we recommend that this be made optional with component Societies.

6. While the committee recognizes, as a general principle, that a uniform system of blanks for County and State Societies is desirable, as soon as practicable, we recommend further consideration of this question at a later conference.

7. We recommend that the House of Delegates of the American Medical Association be asked to consider the advisability of issuing charters to constituent State Associations.

8. We recognize the desirability and advantage of a uniform method of transfer, but this system cannot be established until there has been developed a greater uniformity in other details of organization. We therefore recommend that this question be made the subject of discussion at a future conference.

9. The committee recognizes the value of this conference to the State Association Secretaries, and to the purpose of organization; it therefore recommends that future conferences of this character be held.

The report of the committee was unanimously adopted by a rising vote. It was also moved and carried that the Secretary be requested to send copies of the report to each State Secretary and to each State journal, and that the proceedings of the conference, as published in the Bulletin, be furnished to each State Secretary desiring them, in sufficient quantities to send one to each member of the State Association. After a vote of thanks to the Board of Trustees for making this conference possible by the appropriation, the conference adjourned.

Dr. Marcus Branch Wilkes, of Richburg, S. C., and Miss Ruth Tedder, of Charlotte, N. C., were married in the First Baptist Church of Charlotte on October 9th.

Dr. Wilkes graduated from the North Carolina Medical College in April of this year, and is an intelligent young practitioner.

Dr. Edward Maupen Gayle and Miss Annie Erwin McDowell, both of Morganton, N. C., were married on October 23rd.

Dr. Gayle is one of the assistant physicians to the North Carolina State Hospital,

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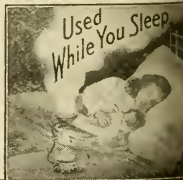
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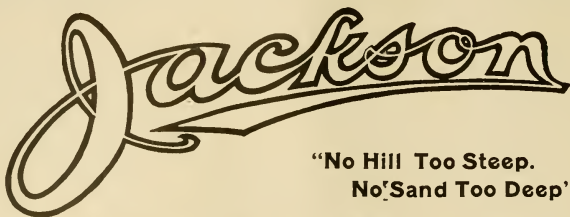
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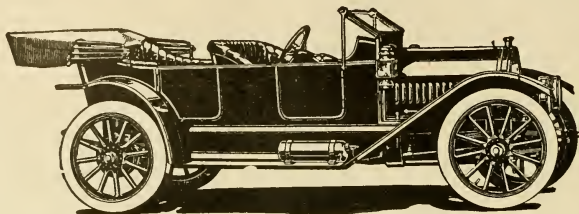
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The name and address of the person to whom the report is to be sent should be clearly indicated.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test.

— After carefully washing, prick the lobe of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and allowed to dry without being spread out on the surface of the slide. After they have dried, the

allowed to dry without being spread out on the surface of the slide. After they have dried, the

slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—

Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count, etc., should be sent to the laboratory on glass slides. As thin a smear as possible should be made.

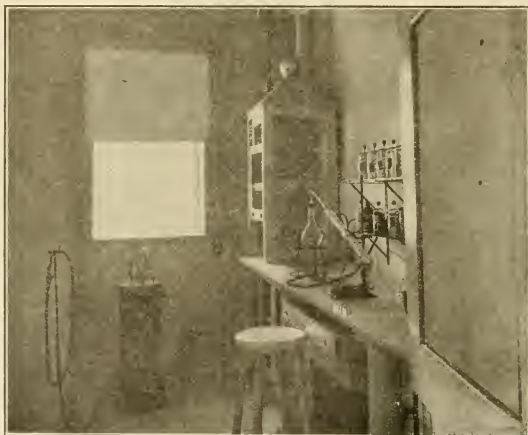
Smears For The Detection of Gonococci.—

One drop of purulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made over the surface of the slide.

In collecting a specimen from a female patient, care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.



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eration or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiled paper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and the material from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in the bottom of the jar before

Urine.—for bacteriological examination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlich's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Pathological—

material from either op-

the tumoris dropped in **Feces.**—should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

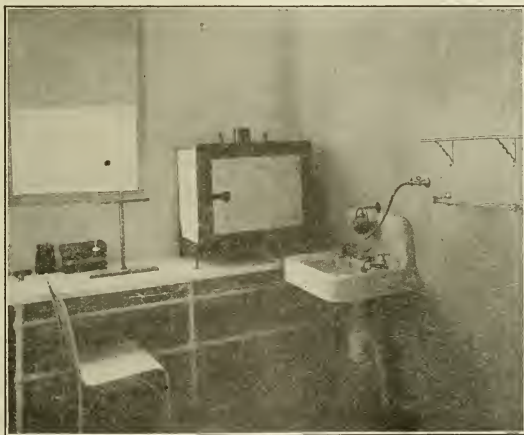
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1st. By using an ordinary antitoxin syringe, and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourniquet applied, taken the blood from the vein by means of the syringe



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to coagulate, cork, pack and mail as any other fragile package. At least two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.—The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.—should be sent in a sterilized bottle. A large vaseline or quinine bottle usually answers the purpose.

2nd. By means of capillary attraction, as illustrated in Fig. 11 represents empty capsule; tourniquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tube, allow



Fig I.



Fig II.

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Infantilism.

de Biehler states that infantilism is a condition in which there is an arrest of development and a persistence of childish characteristics, so that the person appears younger than he really is. There are two types of the disease, one in which the individual appears to be a little man instead of a child, with enlarged thorax and small pelvis, and no disproportion between the head and the body; the hairy and genital systems are undeveloped. There may be either anorchidism or cryptorchidism. There are lesions of the heart, vessels, thyroid, and sometimes the eyes. The nervous system is undeveloped and neuroses, hysteria, or chorea may be present. The second form is accompanied by the symptoms of myxedema, with insufficiency of thyroid and hypertrophy of the hypophysis and thymus. Radioscopy shows an arrest of development of the epiphyses and retardation of the points of ossification. Myxedematous infantilism is due to thyroid insufficiency. The thyroid has some influence on the development of the genital organs, and these are also diseased. In the first type the causes mentioned are anangioplasia, alcoholism, tuberculosis, bad hygiene, syphilis, and malaria. In dystrophic infantilism the ossification is normal; in myxedematous infantilism there are bony changes. Contraction of the pelvis and thorax are accom-

panied by arrest of development of the contained organs. There is no cure for infantilism; all that one can do for these children is to nourish and educate them and protect them from injuries.—*Archives de Medecine des Enfants*.

Green Teeth, Subsequent to a Prolonged Jaundice in the First Weeks of Life.

Thursfield reports the case of a boy who was first seen at the age of three weeks. The history was that he had been jaundiced from birth, or possibly from the third day of life only, and that during the first week he had passed very black stools, and had a purulent discharge from the navel. When seen the umbilicus was perfectly healthy; the liver and spleen were not enlarged, and the child, though small—6 pounds 5 ounces—seemed quite healthy. The jaundice was at this time deep, and remained so for the next seven weeks, slowly disappearing. When it had gone the boy put on weight rapidly and at four months of age weighed nine pounds. He was not seen again till he was nine months old, when he was brought again for an attack of diarrhea. The two lower central incisors were then a vivid yellow tint, which had become now green. The tint varied considerably; it was occasionally quite bright, at other times dull.—*Proceedings of the Royal Society of Medicine*.

Curious Cases of Incompatibility.

In a recent issue of an American pharmaceutical journal attention is drawn to the fact that an incompatibility between a medicine given internally and one applied externally may cause undesirable epidermal manifestations. Reference is made to a case in which hydrogen peroxide was applied externally, while potassium iodide was given internally. The result was a severe burning of the skin, the cause of which was not discovered for some little time. In another instance a colorless tincture of iodine, taken internally, in conjunction with an ointment of ammoniated mercury, externally applied, caused severe irritation of the skin, which was attributed to the toxic action of mercuric iodide. Other illustrations might be given of the importance of avoiding such cases of incompatibility. Thus, sulphur given internally and a solution of mercury used externally may be expected to cause a deposit of black mercuric sulphide in the skin. These instances are of great interest to physicians, as they afford an explanation of phenomena which might sometimes be attributed to idiosyncrasy or some other cause, except the right one.

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Within the last few months an interesting case arose at St. Paul, Minn. A lady had used a certain advertised face-cream for the purpose of removing freckles, and she was horrified to find that her face became variegated in color from yellow to brown and then to black. Since many creams of this nature contain some form of mercury it is probable that the trouble was caused by a chemical reaction between the ingredients of the cream and some medicinal substance she may have been taking at the same time. These illustrations emphasize the danger of indiscriminate self-medication; they further show that care should be taken not to use mercurial creams when undergoing certain courses of internal medication. The apparently harmless sulphur lozenge or compound licorice powder may cause much chagrin and discomfort, if not danger, when taken into the system at a time when a favorite brand of toilet cream is being used to beautify the complexion.—The London Lancet.

Danger Due to Substitution.

Hardly another of all the preparations in existence offers a wider scope to imposition under the plea of "just as good" than the scientifically standardized Eucalyptol.

The most recent fraud practiced in regard to this product is an attempt to profit by the renown of Sander & Sons. In order to foist upon the unwary a crude oil, that had proved injurious upon application, the firm names of Sander & Sons is illicitly appropriated, the make-up of their goods imitated, and finally the medical reports commenting on the merits of their excellent preparation are made use of to give the desired lustre to the intended deceit.

This fraud, which was exposed at an action tried before the Supreme court of Victoria at Melbourne, and others reported before in the medical literature, show that every physician should see that his patient gets exactly what he prescribed. No "just as good" allowed.

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9. Mechanism in breech presentations.

10. Transverse positions.

These plates will be sent in book form to any address on receipt of 25 cts. postpaid.

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Growth in the use of Bacterins.

Treatment of infectious disease, with preparations derived from corresponding micro-organisms is unquestionably growing in favor. Not only do the bacterial vaccines (or bacterins) seem destined to a permanent place in therapeutics, but their field of applicability is constantly broadening. Proofs of this is seen in the growing list of these products announced by Parke, Davis & Co., no less than fifteen of the bacterins now being offered to the profession.

There are a number of reasons for the favor which is being accorded to the bacterial vaccines. In the first place these products are in consonance with the scientific trend of present-day medication. They are being used with a gratifying measure of success. They are being used with a gratifying measure of success. The method in which they are marketed (sterile solutions in hermetically sealed bulbs and in graduated syringes ready for injection) appeals to the modern medical man, assuring, as it does, both safety and convenience. The moderate prices at which they may now be purchased will tend to give them still greater vogue. And these prices are worthy of note, since they represent a great reduction from those formerly prevailing, amounting? if we are not mistaken, to as much as 60 per cent. in many cases. They are announced elsewhere in this journal over the signature of Parke, Davis & Co. and will repay a careful scrutiny.

Link the Past with the Present.

J. Marion Sims many years ago said, "For severe Dysmenorrhea I have found Hayden's Viburnum Compound of great service."

What was true as to the therapeutic value of Hayden's Viburnum Compound in the time of Sims is just as much of a fact today. As a remedy in the treatment of Dysmenorrhea, Amenorrhea and other functional irregularities of the uterus and its appendages, H. V. C. is dependable in action, and as it is of known composition and contains no narcotics it is safe to prescribe.

As a uterine tonic and antispasmodic it is of particular service, and to any physician who desires to clinically demonstrate its therapeutic action samples and literature will be forwarded upon request to New York Pharmaceutical Co., Bedford Springs, Bedford, Mass.

The Charlotte Medical Journal

VOL. LXVI

CHARLOTTE, N. C., DECEMBER, 1912.

No. 6.

Safeguarding and Lessening the Disagreeable Features of Surgical Operations.*

By Southgate Leigh, M.D., Norfolk, Va., Surgeon-in-Charge, Sarah Leigh Hospital.

In these modern times, when in all lines of business and profession, everything tends towards improvement and advance, it especially behooves us as surgeons, dealing with life itself, to see to it that every possible safeguard is thrown around the patients entrusted to our care. It is to our interest also that our work shall be done in the pleasantest possible manner, and with the necessary disagreeable features reduced to a minimum.

In diligently striving to perfect our own work along these two lines especially, we have found the greatest help of all to be in Nitrous-Oxide-Oxygen anaesthesia. We made a preliminary report of our method before the last meeting of this Society, and have followed it by further discussions before the North Carolina State Society, the Virginia State Society, and the Seaboard Medical Association. We have also during the year been fortunate enough to witness the work of Gatch at the Johns Hopkins, and of Crile at Cleveland. Further experience has served to strengthen our faith in this method of anaesthesia, and confirm our conviction that it is without any question by far the safest and pleasantest form of anaesthesia yet devised.

On account of our recently published and full report, it would be out of place here to give a description of our method and work. It will, however, be proper to mention a few important points. We have had at the Sarah Leigh Hospital in all about nine hundred (900) cases, without fatality, and without any bad effects that could in any way be traced to the anaesthetic. In four cases only, have we changed to ether. We have used the method in a number of bad risks, where we would not have dared to give ether. There have been no post-operative complications, such as dilatation of the stomach, pneumonia, nephritis or phlebitis.

We still believe that our method and apparatus are, to some extent, superior to others in use elsewhere.

The chief drawback is that a skilled and experienced manipulator is required.

We believe that the adverse reports ap-

pearing in the journals from time to time are the outcome of erroneous methods or lack of training on the part of the anaesthetists. The Mayos require twelve months rigid training for their etherizers. Such a training, or even less, with Nitrous-Oxide should make one sufficiently accomplished.

For our own clinic we can say most positively that the operative and post operative risk has been materially diminished by our use of Nitrous Oxide-Oxygen, and that we have been able to extend our work to cases formerly operated upon only under local anaesthesia.

Further, we can state that the disagreeable features of surgical work have been greatly lessened by this anaesthetic. The patients are not afraid of it, it is pleasant to take, its effects are rapid and recovery is almost instantaneous. Nausea is reduced to a minimum, and there is rarely any excitement before or after the operation. Dr. Crile has demonstrated the fact that fear often plays an important part in the production of shock, especially with nervous women, and that its effects are not only immediate but remote. We have always shared the same opinion, and have done everything possible to keep our patients in a pleasant frame of mind both before and after the operation. Much can be done along these lines in successful hospital management. Not only should the employees be trained to give the patients the best care and attention, but they should also be required to please them. Too often patients come to hospitals with preconceived adverse opinions, which are sometimes hard to overcome. Nurses and internes cannot be too thoroughly trained to exercise gentleness, kindness and tact.

Dr. Crile finds that the use of morphine and scopolamine before operation helps greatly in lessening fear. In our Nitrous-Oxide work, we prefer morphine and atropine given hypodermically one-half hour before sending the patient to the operating room.

During the past few months, we have been using Dr. Crile's method of nerve blocking, and we believe with good effect, in lessening and preventing shock. We employ novocain 1-10 per cent. infiltrating the tissues "before the knife," and injecting the nerve trunks in appropriate cases. In addition to lessening shock, we believe that this excellent procedure has helped us in other ways also. A smaller amount of anaesthetic is required, retraction is facili-

*Read before the Tri-State Medical Society, Charleston, S. C., February, 1911.

tated, and pain from the sutures is not so acutely felt afterwards, notwithstanding the quick recovery of complete consciousness.

In operative technique, next after thoroughness, nothing seems to us to be more important than rapidity of work. Has not this point been already too much neglected in surgical training? At the great Mayo Clinic, what one factor has to do with the prevention of shock more than this?

Should a patient be kept anaesthetized longer than an hour? Would it not be better to do the operation in two stages?

The profession of today is, we believe, paying much more attention to this very important and much neglected matter.

Among other points of operative technique, especially affecting the risk, should be mentioned the warmth of the patient, gentleness of manipulation, thorough and prompt haemostasis and extreme asepsis.

Our operating tables are not the most comfortable resting places imaginable. The rubber mattress filled either with air or warm water is a distinct advance. It keeps the patient warm and lessens backache afterwards.

The iodine method of skin preparation in a way removes the necessity of the wetting consequent upon the free use of soap and water on the table.

Having had perfect results in wound healing by the old method, we do not as yet feel entirely safe with the new. It is undoubtedly pleasanter for the patient and aids in keeping the body dry and warm, but there is probably some risk in the manner in which it is used by many surgeons. For the present we have adopted the following conservative course: The skin is shaved, washed thoroughly with Jumbo soap and warm water, then with alcohol and bichloride 1-1000, the evening before operation, and a sterile dry dressing applied. Two hours before operation it is painted with half strength tr. iodine, and the sterile dressing re-applied. On the table it is washed with benzine and again painted with half strength tr. iodine.

In connection with thorough asepsis, we are most careful in the preparation of our rubber gloves, using separate gloves for clean and dirty cases, and always soaking the gloves after putting them on in 1-250 bichloride, as an adjunct to the boiling. Further, we believe in the careful collecting and destroying of all septic discharges, both in the operating room and in the wards.

Dr Crile has certainly set us a splendid example in the gentleness with which he handles the tissues, and his thorough haemostasis.

Self-retaining retractors and caution in

inserting pads into the abdomen both greatly lessen shock.

Salt solution by rectum, under the skin or into the vein is helping us materially in combatting shock from hemorrhage and disease both before, during and after operation.

Direct transfusion of blood appeals to us as one of the best remedies in shock prevention. Our own experience has been very limited on account of the difficulty we have had in obtaining subjects to furnish the blood. We believe, however, that before long the public will become sufficiently educated to overcome this obstacle.

We have always insisted upon the usefulness and efficacy of heart stimulants, and have never found good reason to change our opinion. Undoubtedly they have too often been used excessively and probably harmfully, but when judiciously employed they frequently aid in safeguarding in operative surgery. With improved technique, and Nitrous-Oxide anaesthesia, there is but little demand for stimulation, but at times strychnine and other heart tonics are a safeguard.

In dealing with patients of good constitution, and not depressed by accident or disease, the surgical risk is comparatively slight, whatever the method employed, either of anaesthesia or technique. With this class, our improved methods will greatly lessen the disagreeable features of surgical work, will increase the reputation of the surgeon, and will aid in bringing surgery into better repute with the public.

It is in the handicapped cases that our best field lies, those patients with poor resistance, weak constitutions and irritable nervous systems. In this class, we have also the desperate cases, patients almost in extremis from various causes and conditions. From them we get our chief mortality, and it is they that furnish the field for the most judicious and brilliant work.

A frequent and most important example of the desperate cases is illustrated in violent perforating appendicitis with more or less general suppurative peritonitis. The surgeon meets with no cases which require better judgment or more perfect skill. Only a few years ago these cases were practically all of them fatal, whereas now, to the credit of modern surgery, they are nearly all saved.

Just as an example of the efficacy of safeguarding methods, it might be well to mention in some detail the manner of handling a bad case of this kind.

In transferring the patient to the hospital an elevating stretcher is used, and he is placed on a bed moderately elevated and on the right side. If depressed from the trip a few hours delay is often advisable.

Strychnine and sparteine are given hypodermically if needed. A subcutaneous or intravenous infusion is advisable, especially if the vessels need filling. The mouth is cleansed and the skin prepared. The patient is reassured in every possible way, and made as bright and cheerful as the conditions will permit. Morphine sulph. gr. 1-6 with atropine sulph. gr. 1-100 is administered hypodermically one half hour before operation, the dose being varied according to age and condition. The operating table and room are warm. The skin is exposed as little as possible, and is fully prepared before the anaesthetic is started. A little judicious talking from the anaesthetist will aid greatly in lessening fear. An extra amount of oxygen is given with the Nitrous-Oxide. In one or two minutes after starting the anaesthetic, the skin is infiltrated with novocain solution and the operation proceeded with rapidly, infiltrating layer by layer, "before the knife." The transverse incision with separation of the inner muscles is employed. Pus is gently wiped away as it comes into view. Retractors are used gently. If the appendix is easily found, it is quickly removed, otherwise it is disregarded. A very large soft rubber tube is passed well down into the pelvis, and another smaller one up towards the liver, with sometimes a third one or a strip of packing to the site of the appendix. The drains are brought out at the extreme right end of the wound, and the inner part sutured quickly. Gauze wicks are passed down into the tubes and the dressings applied. By this time, the patient is fully recovered from the anaesthesia. There is rarely any nausea. The patient is carried quickly to the ward on an elevated stretcher and placed on his right side on the bed, which is elevated as high as his heart condition will permit. Continuous salt solution is started by the bowel and subcutaneous or intravenous infusion is given if necessary.

Now, I have no doubt that some of you will say that I have told you nothing that is new. And that may be so. Nevertheless it is a good thing for us when we get together in these splendid meetings, to confer with each other about these vital matters, and it is also good for our patients.

Clinical Lecture. Etiology and Symptomatology of Gall Stones.

By Stuart McGuire, M.D., Professor of Clinical Surgery in the University of Medicine, Richmond, Va.

The liver is the largest and one of the most important organs of the abdomen. Its most obvious function is the production of

bile. One of its most essential duties, however, is the destruction of the bacteria coming to it from the digestive tract through the portal system before the blood enters the systemic circulation by way of the hepatic vein. The liver secretes between 20 and 30 ounces of bile every 24 hours. Healthy bile was at one time supposed to be free from germ life and even to have mild antiseptic properties; more recent and accurate investigations, however, show that it always contains a moderate number of bacteria and that it is a good culture medium.

Most of the bile produced by the liver passes directly to the duodenum through the hepatic and common ducts. A small proportion passes up the cystic duct to the gall-bladder where it is stored and somewhat modified by absorption and admixture with mucous. When stimulated the gall-bladder contracts and forces its contents back through the cystic duct to the general bile stream. Bile, on reaching the intestinal tract, stimulates pancreatic secretion, neutralizes the acid chyme of the stomach, emulsifies fat present in food, and excites the peristaltic action of the bowel. When bile reaches the cecum the fluid element is absorbed and returned to the circulation, while the pigments and waste products are excreted in the feces.

The Gall-Bladder is a pear-shaped organ capable of holding about one ounce of bile. Its function is unknown, and people seem to get along as well without it as they do with it. The amount of bile it is capable of holding is so small, compared with the total secretion of the liver, that it cannot act in an important way as a reservoir. Some think it acts as the air chamber to a fire engine, regulating the flow of the stream. Others that it secretes mucous, which mixed with bile serves as a lubricant to the ducts. At any rate the gall-bladder, like the appendix, is a good friend to the surgeon.

The Hepatic Duct begins at the transverse fissure of the liver. It is about two inches in length and $\frac{1}{8}$ of an inch in diameter. It unites with the cystic duct to form the common duct.

The Cystic Duct is about $1\frac{1}{2}$ inches long and $\frac{3}{8}$ inch in diameter. Its mucous lining is thrown in crescentic folds which normally prevent the passage of a probe from the gall bladder to the common duct.

The Common Duct is about three inches long. It empties into the duodenum together with the pancreatic duct at the ampulla of Vater. The common duct is divided for description into three portions. The supra-duodenal, the retro-duodenal and the trans-duodenal. The supra-duodenal is about $1\frac{1}{2}$ inches long. It runs

downward in the free edge of the gastro-hepatic omentum and forms the anterior boundary of the foramen of Winslow. The retro-duodenal portion of the duct is about one inch long and, as its name implies, lies behind the duodenum. In 40% of cases it runs in a groove on the head of the pancreas. In 60% of cases it passes directly through the pancreatic tissue. The trans-duodenal portion of the duct is about $\frac{1}{2}$ inch long and passes obliquely through the wall of the gut to open in common with the pancreatic duct at the ampulla of Vater. The first portion of the common duct is easily accessible to palpation and manipulation as it can be raised by hooking the fingers in the foramen of Winslow. The second and third portions of the common duct are difficult of access and it is often necessary to make an incision into the duodenum to approach them surgically.

The Pancreas is formed in the embryo by two buds. It retains to a certain extent its primitive form and has two lobes which are drained by two ducts having separate opening into the duodenum. The duct of Wirsung is the main drain of the pancreas in 83% of individuals. It opens into the duodenum at the ampulla of Vater together with the common duct. This has been termed an unfortunate association of terminal facilities between the liver and pancreas, as interference with traffic in one system may block the service in the other. The duct of Santorini is the main drain of the pancreas in 12% of individuals. When the other duct is obstructed it is capable of acting as the main drain in 54% of cases. It opens into the duodenum a short distance below the pylorus.

Gall-stones are concretions formed in the gall-bladder. It is possible they may form in the hepatic or common duct but such cases are extremely rare. Gall-stones are not calcareous but fatty substances, as can be demonstrated by subjecting one to the heat of an open flame when it will soften and burn much like sealing wax. Gall-stones are composed of cholesterine, bile pigments and lime salts. The proportion of these elements are not constant and as a result the color of the stone may vary from light yellow to dark green or black.

Gall stones vary in size and number; they may be as small as mustard seeds or as large as goose eggs. If multiple they are often faceted from pressure one against another. Numerous cases have been reported where several thousand have been found in one patient.

Gall-stones are formed in from a few days to a few weeks. They are usually all formed at the same time and are symmetrical, although cases are sometimes seen where

there are several crops of stones as shown by the entirely different color, size, shape and proportion of chemical constituents.

Gall stones frequently migrate from the gall-bladder. They often pass in the cystic, hepatic and common ducts. They frequently reach the duodenum either by way of the ducts or through a fistulous opening between the gall-bladder and bowel. They are sometimes vomited and often pass at stool. Occasionally they enter the appendix and sometimes they lodge at the ileocecal valve or some other portion of the intestinal canal producing obstruction.

The cause of the gall-stone formation has been a question giving rise to much discussion. It is a fact that 50% of gall stones occur in patients over 40 years of age; that 75% of all gall stones occur in women and that 90% of these women have borne children. It is also a fact that 33% of people with gall-stones give history of typhoid fever and 25% give history of having had an attack of appendicitis. Finally, it is a fact that gall-stones are more common in people who lead sedentary lives, eat and drink imprudently and suffer from constipation and obesity.

The theory of the etiology of gall stone disease at present accepted is that the condition is due to the combination of predisposing and essential causes. The predisposing causes are supposed to be factors which produce stagnation of the biliary current, under which must be considered age, sex, pregnancy, tight lacing, obesity, constipation, imprudence in eating and drinking, lack of exercise and fresh air and other errors in the habits of living.

The essential cause is supposed to be the infection of the gall bladder and the production of chronic cholecystitis. The micro-organism most often responsible for the infection are the colon group, including the typhoid bacillus. Welsh has found the typhoid germ in the gall-bladder seven years after an attack of typhoid fever, and clumps of bacteria are frequently found in the nucleus of gall-stones. Attempts to produce gall-stones artificially in animals by infection have usually failed because the resulting inflammation has been so acute as to produce destruction of the mucous lining of the gall-bladder. Success has only been secured when the germs employed were so attenuated as simply to produce irritation.

The avenue by which the bacteria reach the gall-bladder is a matter of dispute. Some authorities claim that they pass directly from the intestinal tract through the common duct. This theory is favored by the observation of Bond that particles of indigo carmin placed in the rectum were

carried up by a reverse mucous current and could be demonstrated after a certain time in the gall-bladder. Also by the observation that the bacillus prodigiosus introduced within the anus could be recovered in two hours from the animal's mouth. Opposed to this theory are the facts that the duodenum is usually sterile and that infection would travel with difficulty up the common duct in opposition to the rapidly flowing stream of bile.

Other authorities claim that the infection reaches the liver through the portal blood and is conveyed to the gall-bladder by the agency of the bile. In ordinary health the blood going to the liver through the portal system contains many bacteria picked up in the passage through the digestive tract. The reason for its going through the liver prior to return to the general circulation is to permit the annihilation or attenuation of its infection. If this infection be present in health it exists to a much greater extent in disease. Proctitis, colitis, enteritis, appendicitis, typhoid fever, ulcer of the duodenum or stomach, abscess of the spleen, inflammation of the pancreas or lesion of the liver itself, would all throw an additional amount of infection in the blood stream. As a result the bile would be infectious and chronic cholecystitis with gall-stone result. This theory explains the frequency with which gall stones follow appendicitis, typhoid fever, duodenal ulcer and other diseases of the gastro-intestinal tract.

Post-mortem examination made by pathologists of all patients dying in large hospitals and the examination of the upper abdomen by surgeons as a routine measure in abdominal sections has shown the presence of gall stones in many cases where they were not suspected to exist. It is stated by several reliable authorities that about one person in ten has gall-stones. If this be true, the condition should be constantly borne in mind when examining a patient with abdominal trouble, and both physician and surgeon should make a thorough study of the symptomatology of the disease in order that he may recognize it early and treat it properly.

Indigestion is the earliest and most frequent symptom of gall-stones. It is not produced by imprudence in eating, comes on without definite relation to taking food, and is usually relieved by vomiting.

Pain located in the epigastrium and radiating to the back is another fairly constant symptom. It is dull aching in character and varies in intensity. It is increased when the gall-bladder is distended and relieved when it is emptied.

Tenderness over the gall-bladder can gen-

erally be elicited by spreading the fingers of the left hand over the patient's ribs and hooking the thumb under the costal margin. When the patient takes a deep inspiration, the diaphragm forces the liver down and the sensitive gall-bladder coming in contact with the examiner's finger causes a sudden catch in the patient's breath.

Colic is a familiar symptom. It is due to the sudden blockage of the duct and the muscular contraction of the gall-bladder to overcome the obstruction. Colic is abrupt in its onset and sudden in its relief. The patient is doubled up in agony, and there is faintness, nausea and vomiting.

Jaundice is not a very frequent symptom of gall-stones. According to Murphy it only occurs in one out of seven cases. Jaundice is due to obstruction of the common duct. Bile, unable to escape into the duodenum, exerts a back pressure on the liver and there is rupture of the biliary radicles. Bile is taken up by the lymphatic and carried to the general circulation causing the characteristic discoloration of the eyes and skin, and giving, sooner or later, the symptoms of cholemia.

Obstruction of the common duct may be caused by it being plugged by a stone from within or compressed by a growth from without. Attention has been called to the fact that the retro-duodenal portion of the common duct lies in or on the head of the pancreas. Disease of the pancreas, whether inflammatory or malignant, which causes it to be enlarged, will by pressure obstruct the common duct and produce jaundice. It is a fact which cannot be too strongly impressed that most cases of gall-stones are not attended by jaundice and most cases of jaundice are not due to gall-stones. The differentiation of jaundice due to gall stones and jaundice due to malignant disease is based on the fact that jaundice due to gall-stones is usually preceded by colicky pain, while jaundice due to cancer is not attended by pain. Also by the fact that jaundice due to gall-stones varies in intensity, deepening after an attack of pain and then clearing up, while jaundice due to malignant disease gradually gets deeper and deeper and never lessens. There is yet another fact, first emphasized by Courvoisier, namely, that in jaundice due to a stone in the common duct the gall-bladder is contracted and cannot be palpated, while in jaundice due to malignant disease the gall-bladder is distended and can usually be felt.

Fever is a frequent symptom of gall-stone disease, due to an increase in the acuteness of infection. It is marked by its rapid rise and abrupt termination. If the range of the temperature be charted, it gives an ap-

pearance which Moynihan calls "The Steeple Chart" and Murphy terms "The Temperature Angle of Cholangic Infection."

Tumor or a movable pear-shaped mass which can be palpated in the region of the gall-bladder indicates either obstruction of the cystic duct with a stone and distention of the viscus with mucus, or the obstruction of the common duct by cancer and the distention of the organ with bile.

It sounds like a paradox, but it is a deplorable fact that most cases of gall-stones are treated by the physician for indigestion, and that many cases of supposed gall-stones operated on by surgeons are the victims of some other disease. Mistakes in the diagnosis of gall-stones are due to all the early symptoms being referred to the stomach and the supposedly pathognomic symptom of jaundice being most frequently due to cancer.

Indications for Caesarean Section.

By Virginius W. Harrison, M.D., Associate Professor of Obstetrics, University College of Medicine, Richmond, Va.

Twenty years ago surgeons were not at all united as to what cases of appendicitis should be operated on. Definite indications were only reached after great experience and greater controversy. The same will be recorded in regard to the indications for Caesarean section, when the final paper has been written.

Celiostomy, or classic Caesarean section, has been done for many years, but improved surgical technique has brought forward the subject with renewed interest and a greatly reduced mortality, thereby widely extending the indications for the operation.

During the years 1787 to 1876 the mortality in some places from this operation was one hundred per cent.; now it is done by any experienced abdominal surgeon, in selected cases, with a mortality of a little over two per cent.

The indications for Caesarean section could be divided and discussed under the following heads:

(1) When done by a capable surgeon under suitable surroundings;

(2) When done by the city obstetrician with skilled assistants, and

(3) When done by the country doctor who has very little help and poorer aseptics.

The mortality will be great in the third class, less in the second and very small in the first class.

We could also discuss the route of the operation, whether it should be abdominal or vaginal; but I will limit this paper to the indications in general for the operation,

supposing it to be done by a skilled surgeon and in a properly equipped hospital.

Indications for Caesarean Section.

(1) Placenta praevia, (2) eclampsia, (3) contracted pelvis or large fetus, (4) pelvis obstructed by an immovable tumor or other growth which may delay labor and (5) cancer of the cervix, vagina or rectum.

In presenting this paper I will claim nothing original, and will try and present the views of others as I gather them from literature, possibly quoting some without giving credit therefor. My desire is to create a discussion of this live subject which is increasing in importance with great rapidity.

Equally skilled operators differ so much in regard to some of the indications for this operation, that it will be hard to draw many definite conclusions.

Placenta Praevia.—Most authorities are practically united in the opinion, that in primipara with central implantation of the placenta and an undilated cervix, the indication for Caesarean section is absolute and allows of little debate. Even when the placenta is marginal, and the loss of blood is considerable, with the same condition of the cervix, the indication is clearly the same.

The opinion of these gentlemen is not so uniform when the cervix has been stretched by a previous labor, and is capable of dilatation by Harris' method, and the child delivered manually or by forceps. The majority are in favor of the latter method. Some cases may be presented which will certainly be border-line in classification, and either method may be the operation of choice under certain conditions. McPherson (J. A. M. A., Sept. 7, 1912) states that the maternal mortality from placenta praevia is from 11 to 18 per cent., and the fetal mortality is from 40 to 57.3 per cent. Under Caesarean section he says the maternal mortality is less than 4 per cent.

For these operations to have a low rate of mortality it is presupposed that the woman has not been infected by unnecessary vaginal examinations and no attempts at delivery by other methods.

Williams, in his text-book (1912) in discussing the operation for placenta praevia, says: "While admitting that such a procedure may be justifiable in rare instances, I agree with Holmes that it is usually unnecessary, and if adopted in a large series of cases would not decrease the mortality of the affection."

On the other hand, Davis, Peterson, Burns, Stillwagon and others agree with McPherson as quoted above; some of those who believe that Caesarean section should

be done prefer the vaginal to the abdominal route.

The vaginal route, to my mind, is not indicated in many instances, as any cutting operation either through or near the placenta site would predispose to greater hemorrhage. We all realize the greater liability of women with placenta prævia to sepsis and to deliver the patient with that rapidity which is often necessary, borders on what Williams calls "brute force." Even if we are successful in delivering a live child, we are apt to have a badly mutilated woman which Davis remarks in speaking of difficult labors "no skill known to surgery is equal to repairing them, and the children so delivered are often subjected to such forcible manipulations, compressions and injuries that we marvel that they survive."

There seems to be no reason for delaying the operation in a primipara with placenta prævia if she is losing a quantity of blood and an undilated cervix, nor even if the placenta is centrally implanted and no blood is being lost; neither should we delay in multipara if there is a rigid cervix from cicatricial tissue or a contracted pelvis.

The above opinion presupposes that the obstetrician has not tried to deliver by other methods, and does not present a patient infected, mutilated and exhausted in strength, so as to be a bad surgical risk for any operation. If on the other hand this woman be subjected to operation at the beginning of hemorrhage, the shock from the operation plus blood loss, will not be any greater, if as great, as would be from manual dilatation and high forceps delivery. There will be clean wounds to heal after a section and little if any morbidity.

My own experience with placenta prævia, at term, has been limited to nine cases, all delivered by forceps or manually, with no maternal mortality. All women had had previous labors. The fetal mortality was seven. The morbidity was not great except in one case. This woman was in her sixth labor, last three had been cases of placenta prævia. Attended by a different obstetrician each time. The time I attended her, as in the labor just previous, she had thrombophlebitis of the right pelvic veins; in both labors was ill for three months; she made a partial recovery. I am inclined to believe, from the history obtained, that her real infection began with her first placenta prævia, and that had a Caesarean section been done at that time, she would have been saved a life of morbidity. After these bloody operations we can often make a lasting impression on the family, by assuring them that we were very fortunate in saving the life of the patient, much less the child. This of course is

neither scientific nor practical obstetrics. The time is now at hand to be satisfied only when we have delivered a woman with as little damage done to her anatomy as possible, and with a child free from injury.

We must educate the public, that a safe Caesarean section with health to follow, is much better than an instrumental or manual delivery with possibly an idiotic child and an invalid wife. The people are going to be educated along this line, and if we do not educate them, they may unpleasantly and unexpectedly educate us.

Eclampsia.—As in medicine so in obstetrics, we are drifting slowly but surely towards the prevention of diseases. Eclampsia is one that may be prevented. At present this may sound more like theory than practice, yet with improved methods of study, and with the distinction being made between the various toxæmias of pregnancy, we will be able to recognize the early symptoms, and apply the correct treatment, or operate in time to prevent permanent damage being done to the maternal organs.

Some one has said "there can be no eclampsia if there be no pregnancy; therefore the best remedy is to rid the woman of the cause." Here again the primipara comes in for our serious consideration. They are the hardest to deliver. It is true that labor pains frequently are coincident with the convulsions, yet these pains are not always of sufficient strength and frequency to dilate the cervix and deliver the child, in time to prevent permanent maternal damage. When, then, we have a woman with an undilated cervix, if she be a primipara and the convulsions are following each other with rapid succession, or in a multipara with a contracted pelvis, or any obstruction that will delay delivery, Caesarean section is indicated. The operation of election gives the best results, that is before infection or mutilation of patient.

The vaginal route appears to be the preference of most operators. Hirst (Textbook, Obstetrics, 1912) with an experience of two hundred or more cases, says, "If the patient fails to respond to medicinal treatment, the evacuation of the uterus should be tried by vaginal Caesarean section, by forced dilatation of the cervix, or even by the abdominal Caesarean section." He also says there is no doubt in his mind that much the lowest mortality is secured by avoiding accouchment force as routine treatment.

Peterson (A. J. Obstetrics) reports five hundred collected cases of eclampsia with a maternal mortality of 28.9. He states that if the patient is operated on after the first convulsion that the mortality is as low as 18.5 per cent. McPherson agrees with

Peterson, and says "the inactive policy which is somewhat natural to the obstetrician, who is justly conservative in his methods, may be and usually is the worst possible treatment for eclampsia.

Williams believes that the vaginal section should be done, and the abdominal route only when associated with contracted pelvis.

Stillwagon thinks that the operation is indicated in eclampsia in primipara, in any condition in which other methods would cause delay or unusual trauma to mother and child.

T. M. Burns has done seven consecutive sections and saved all mothers and all children. Zinke, on the other hand, reported to the American Medical Association in June, 1912, that he had treated nine cases of eclampsia without operation, and had neither infant nor maternal mortality. While he advocated Caesarean section eleven years ago, Dr. Zinke performed his first operation two months previous to and reported it at the meeting of the American Association of Obstetricians and Gynecologists in September, 1912.

Montgomery reports as follows: "In many of these (eclampsia cases) vaginal Caesarean section may be the method of choice, but if the pelvis is slightly contracted and the woman comes to her first labor threatened with eclampsia, with high arterial tension, the chances against both mother and child will be greatly reduced by the employment of Caesarean section.

In a series of 715 personally conducted labors at term, my only maternal death occurred in a primipara with eclampsia. In this case the convulsions were recurring with great rapidity when I first saw her. The cervix was dilating, and by the use of Harris' method dilatation was completed, and the first child was delivered by forceps. This child died during delivery. The second child, presenting by the breech, was delivered manually. This child is living and well now, four years since birth.

The laceration of the mother was extensive, which was repaired by the immediate operation to control hemorrhage. The convulsions continued in the same frequency until death forty-eight hours after delivery. Had this patient been seen before labor the convulsions might have been prevented, and had she had a Caesarean section she might have had a better chance for her life.

We must realize, however, that eclamptic patients stand operations of any kind badly. Seitz (Hirst's Obstetrics) quotes 123 cases in which convulsions ceased after emptying the uterus, and yet 20 per cent. died.

Contracted Pelvis.—In contracted pelvis

our chief concern is whether the passage is large enough for the passenger. We have no absolute way of demonstrating this knowledge, unless we agree with Barbour when he says that the fetal head is the best pelvimeter. Numerous instruments have been invented and many methods have been promulgated for determining the length of the various diameters of the important planes of the pelvis, through which the fetal head must traverse, yet they are only relative in their result. We can only estimate the probability of success. We have to take into consideration the separation of the bones of the pelvis; the extent of moulding to which the fetal head is capable, and the extra force that may be developed by the maternal voluntary muscles. All these conjoined will bring about surprises at times, and allow the unexpected to happen.

At present a conjugata vera measuring 8 cm. or less, indicates Caesarean section in an uninfected woman. This is especially true after the test of labor, and there is no engagement of the head in the superior straight. I am speaking of cases not seen until the onset of labor, not of those cases in which labor might have been induced at the thirty-sixth week, nor of those cases in which pubiotomy might be indicated.

Bacon says that "statistics show that the possibility of spontaneous labor with a conjugata vera of 9 cm. to 10 cm. is 70 per cent.; 8 to 9 cm. 40 per cent., and from 7 to 8 cm. 10 per cent.

W. M. Sprigg reports fifteen consecutive Caesarean sections for deformities of the pelvis without a maternal death, and only one infant perished and that due to the anesthetic.

H. M. Miller says "high forceps should not be used unless the surroundings do not justify Caesarean section, and then be prepared for an infant mortality of fifteen per cent. and a maternal mortality equal to elective cases of section and more morbidity.

A. B. Davis thinks the most favorable time to operate is just before or soon after labor begins. He says "we very often regret delivery by forcible means and very seldom believe we have made a mistake in electing the abdominal Caesarean section." He reports one hundred operations for contracted pelvis in a series of one hundred and thirty-four sections for all causes. In the total operations he had a mortality of seventeen; and of the one hundred and thirty-six (twins twice) children, twenty-four died. Fifteen of these children were born alive, yet died before the mothers were discharged from the hospital. Attempts at delivery had been made in eight cases before he saw them and were infected and some were about to die.

An enlarged child with a normal pelvis would give the same indication for Caesarean section as a contracted pelvis and a normal child.

Pelvic Obstructed by an Immovable Tumor.—At the examination at about the sixth month, which by the way should always be done, if a tumor be found which would be likely to interfere with labor it should be removed, with the hope that pregnancy will go on to term. Sometimes we find tumors, such as dermoids, occupying the pelvis which will allow the child to pass, especially when the pelvis is roomy and the child is small. I remember one case that I saw for the first time when the woman was in the beginning of the second stage of labor. On vaginal examination I found a tumor imbedded in the pelvis. I immediately began preparations to remove her to the hospital for section. While at the 'phone I was told that the child had been born.

Cancer of the Cervix.—In cancer of the cervix we usually have an indication for the operation under consideration. By nature of the disease we have an unyielding condition, which will lacerate and not stretch. If the cancer is discovered early in pregnancy it is better to operate early with the hope of saving the mother. If the diagnosis is not made until late in pregnancy, the opinion seems to prevail that we should wait until the child is viable, then by section remove child and cancer.

Sometimes cancer of the vagina and even of the rectum may interfere with delivery and become an indication for Caesarean section.

Other conditions have been mentioned as indications for the operation which I will only mention, in closing.

Physiological incapacity in a senile uterus, in other words, where a woman has married late in life, and the uterus has begun to atrophy, and has not the power to deliver the child, even when assisted by the voluntary efforts of the woman.

Some writers predict that in the early future delivery by the high forceps will be displaced by section. Another indication spoken of is where the membranes rupture early in labor and tonic contraction of the uterus exists, thereby threatening rupture. Again obstruction to labor due to a previous fixation operation.

My primary intention in writing this paper is to have a discussion of the most common indications for Caesarean section, viz: Placenta praevia eclampsia; and contracted pelvis.

The statistics of surgeons give an undoubted lessened mortality and morbidity to the mother, with a more decided lessened mortality for the fetus, to say nothing of

the reduced number of children with birth paralysis and other injuries to the head which may render them a life long invalid
401 N. Allen Ave.

Eye Strain.*

By T. F. Staley, M.D., Bristol, Va.-Tenn.

Much that concerns eye strain and its local and systemic results and their treatment by proper lenses is well known by the profession in general, but it is not recognized as it should be. To aid in the understanding of these important conditions I am before you with a paper to emphasize the importance and to show the results obtained, when the subject is given the time and attention it demands.

The world, especially the lay world, rapidly also the medical world, is at last becoming aroused and convinced that a vast deal of its suffering and its functional systemic disease is due to eye strain. The absorbing interest centers about the crux of the whole matter,—the accurate correction of ametropia.

In spite of what has been done, eye strain is a matter which has been too greatly neglected. There is no doubt that many a worthy student has been dropped in disgrace when, had his eyes permitted him to study, he might have completed his course with credit. It is important, therefore, to recognize that eye strain is not a fad, and not simply a pet subject for eye specialists to harp about.

Defective or ametropic vision is a real condition afflicting most seriously the lives and careers of great numbers of people, and among college students it is one of the most important causes of failure and ill success.

We are indebted to Dr. Geo. M. Gould for insisting upon the reality of this condition all over our land, and further than this, we are indebted to him for emphasizing the importance of exact correction of astigmatism and anisometropia, for these two conditions are the great causes of eye strain, and of a large number of systemic diseases. The beginning of ill health is certainly often to be traced to reflex disturbances of ocular origin.

No one will doubt the important part played in a great majority of our cases by reflex disturbances, but I dare not speak of reflexes in general, for this would take too much of your valuable time; I shall, therefore, limit myself to a discussion of those reflexes due to refractive errors, muscular errors, and other abnormal conditions of the eyes.

*Read before Virginia Medical Society held at Norfolk, October, 1912.

I do not ask you to accept my opinion without that of others concerning the important part played by refractive errors, without, at the outset, quoting from some men in the profession known to most of you; not eye men especially, but general practitioners and surgeons all over the country who are recognizing more and more the importance of eye strain and the results to be obtained from accurate work.

Dr. Geo. Ben. Johnston, in a recent letter to me, says, "In regard to headaches of ocular origin for a great number of years I have recognized the importance of this. I fully believe that 90 per cent. of chronic headaches are of ocular origin, and that these may be relieved by an absolute correction of the strain. It is impossible to overestimate the value of a good refractionist's work in this class of cases, and some of the most brilliant results I have ever seen in medicine have been gotten by accurate refraction. It is of almost daily occurrence that I find people with neuralgias, gastrointestinal disturbances, profound nervous conditions and supposed brain tumors and the like, and when these cases are properly investigated they are shown to be the victims of eye strain and are almost invariably cured by the proper glasses. I look upon a good refractionist as one of the most valuable men in the medical world to-day, and could not pursue my surgical work in as satisfactory a way without the aid of such a man."

This is one of the many letters I have recently received from physicians and surgeons asking them to give me their opinion on the subject of eye strain. One prominent surgeon in our State and a member of this Society wrote me these words: "I know absolutely nothing of the subject," and I feel sure he does not.

Dr. Robt. T. Morris, of New York, wrote me quite a lengthy letter; I will only quote a part: "Some years ago my attention was called to the subject of eye strain and I at once made some investigations and found that many cases that were sent in for surgical operations were in reality subjects for proper glasses. These included cases of various facial neuralgias, gastric disturbances with the question of ulcer of the stomach, and in fact a large range of cases in which the cause for disturbance was not quite clear, but in which the physician thought best to send the cases to me, as surgeon. A good eye man cured so many of these cases that it opened my eyes widely to the vistas of a new field of observation. I saw so many made well by proper glasses that it was a revelation. Most of my practice was in New York and when I sent selected cases to ophthalmologists for ex-

amination relative to the subject of eye strain I found not only that much skepticism existed among eye men, but I was even looked askance by some and was informed that I had better stick to surgery. I had learned too much about the subject, however, and it became necessary for me to go over the field very carefully and select ophthalmologists who were familiar with the subject."

I wish to state that in a great percentage of my cases it is precisely the low errors of refraction "too slight to diagnose and too trivial to correct," according to some, in which I get my most brilliant results. It is in these cases where the most ruinous reflexes in the general system occur and the little "insignificant" ciliary muscle plays such a role.

It does not seem an extravagant contention that eyes which do not perform their functions perfectly in all respects and under all conditions, or whose use is attended or followed by local disturbances, or by headache, nausea, insomnia, or other reflex disturbances, ought, without exception, to be promptly and critically examined. And I mean a thorough examination as made under mydriasis, for, in my opinion, all cases under forty and mostly those under forty-five, should be examined in this manner.

The knowledge that relief from headache may come through wearing glasses is becoming more and more widely diffused, but all have not come to learn, as yet, the forms which reflex disorders of ocular origin may take on, or to estimate at its true value what the accurate correction of these defects mean to our patients.

Why, you ask, is it that so many failures occur to relieve symptoms of eye strain? Surely I might ask, to be fair, why so many failures occur, also, in medicine and surgery?

It is not the fault of the general practitioner or surgeon who refers the patient thinking that his trouble is due to eye strain, nor the patient. It lies almost wholly with the refractionist, and depends upon an accuracy (demanding time and attention) of refraction and repeated tests to measure rays of light and focus them upon the sensitive retina of the eye.

When properly diagnosed, our failures should not be more than 5 per cent. The patient may have got his visual apparatus into very bad habits long before he appears at the refractionist's office. We are, in fact, using our eyes as mechanical instruments rather than as delicate organs worthy of the utmost care. The endless wear and tear goes on until the well-nigh exhausted organ forces its claim for recognition, and the vic-

tim appears exacting a miracle at our hands, when, at best, we can only save and repair, not create or restore destroyed tissue. One of the most suggestive points, perhaps, is to learn whether there is any apparent connection between the onset of the discomfort and use of the eyes. Are the headaches absent on vacation days when the eyes are practically at rest? Does the headache always appear soon after or is it aggravated by close work, such as reading, sewing, writing, playing upon the piano, etc? Does it appear soon after sight-seeing, shopping, looking at pictures, traveling in the cars where objects are flitting rapidly past the eyes? It not infrequently happens that the headache does not appear immediately upon the use of the eyes, but follows after a lapse of some hours, and, very difficult of explanation, after sleep.

I should not think I was suggesting too much were I to insist that in every case where the disease is not clearly and positively traceable to some organic or functional disease of other organs, the eyes should, without exception, be subjected to a thorough and painstaking examination.

Much importance attaches to the post-mydriatic examination, and I wish every eye man might read Dr. Wm. Martin Richard's excellent article on this subject which can be found in *Annals of Ophthalmology*, April, 1912.

Some Phases of Middle Ear Inflammation.*

By Dr. Leland O. Mauldin, Greenville, S. C.

Mr. Chairman and Gentlemen of the Fourth District Medical Association:

Middle ear inflammation may be evidenced by a great variety of symptoms grading from a slight dullness of hearing and earache to a combination of symptoms induced by meningeal and brain complications or due to the absorption of toxins produced by the germs that cause the inflammation.

It is therefore necessary in a short paper to write of only a few phases on such an important and comprehensive subject as "Middle Ear Inflammations," and in so doing it shall be my endeavor to deduce some of those that are most common and practicable—interesting alike to the general practitioner and to the specialist in otology.

The first phase of the subject I wish to deal with is a very common complaint and frequently a very difficult one to handle from a physician's standpoint. It is often spoken of as "earache." What is earache?

It is a symptom usually indicative of inflammation in the middle ear, eustachian tube or throat, or frequently of all these parts, and sometimes of the external auditory canal.

As a symptom it is worthy of more than a passing consideration, for it is a signal pointing to the activities of the micro-organisms at work with such ceaseless energy in delicate tissue as to make a veritable storm centre of pathological formation in such an important organ of the human body as the auditory apparatus. When we think of the possible pathological significance of this symptom, little do we wonder that the delicate nerve filaments revolt with the cry of pain; little also should we wonder at our unsuccessful efforts in many instances to alleviate this pain.

Coming now to a more direct consideration of earache as a symptom, I wish to incidentally mention that it is sometimes due to an auto-intoxication from imprudent eating and sometimes to a forcible inflation of the tympanic cavity without necessary inflammatory action, but it is most frequently due to inflammation, acute or chronic, in the middle ear or in tissue intimately connected with same.

The middle ear is well supplied with sensory nerves and nerve filaments which have an intimate communication with branches of the sympathetic, glossopharyngeal and fifth nerves, hence sometimes in middle ear inflammations we have not only pain in the ear but pain reflected to various parts of the head, face and throat, and by pressure effect of serum, pus or swelling formed as a result of the inflammatory action we get more extensive complications involving the structures of the internal ear.

I shall not endeavor to give here, however, a text-book classification of middle ear inflammations or to tell extensively of their pathology or to give examples of rare cases, but my prime reasons for a paper on this subject are to present a few facts that will be useful to us in preventing these inflammatory conditions in the ear and in arresting the development of disease conditions that start in early life and that result in later years in a partial or complete loss of hearing associated with baleful acoustic complications.

No so-called case of earache should be treated on its symptomatology alone. A careful study of the associated conditions of the throat and nose is eminently scientific, for it is usually in the mucous membranes of these structures that lie hidden the real cause of most of our acute and chronic middle ear abscesses.

Adenoid growths in the naso-pharynx furnish, of course, excellent breeding ground

*Read at the annual meeting of the Fourth South Carolina District Medical Association held in Spartanburg November 18, 1912.

for microorganisms that infect the ear through the eustachian tube as well as an excellent obstruction of the eustachian tube to render unhealthy its mucous membrane, thereby making more possible infection of said tube. In treating these middle ear diseases, then, it is highly important to render as near sterile as possible the mucous membrane of the nose and throat and to remove by operation obstacles such as adenoids and adhesions, and by treatment swollen conditions, any of which may block the eustachian tube and prevent a free drainage thereof. Then an effort to antiseptically treat the mucous membranes of the nose and throat should be made by means of suitable douches, sprays or applications. Even when an acute stage of inflammation in the ear is on an antiseptic spray in the nose consisting of boric acid, thymol and menthol in an oil base has been effective in sterilizing the mouth of the eustachian tube and in reducing its swelling so that it can drain freely.

Many are the instances in which I have relieved a painful incipient earache in children by such simple measures as this. This step is certainly worthy of our procedure because it is combatting the most frequent cause and at the same time relieving a distressing symptom.

When referring to a child's earache, partial deafness or inattention, the expression is often made to us by the relatives, "It runs in the family, doctor." As physicians it is incumbent upon us to look deeper than the surface meaning of this expression and not accept it as a hereditary conclusion that nothing can be done. The very fact that such conditions are inherent in some families makes it more emphatic our duty to look more keenly into the reason why.

Frequently we find such conditions present that a naso-pharyngeal sterilization and slight operative procedures in the way of removal of adenoids will correct and prevent a child from going through life handicapped by deafness.

These preventive measures I consider the most important phases of middle ear inflammation, especially from the standpoint of a conscientious doctor.

In the acute infectious diseases of childhood, especially scarlet fever, influenza and measles, a sterilization of the naso pharynx by means of a good antiseptic spray will prevent the ear complications that happen too often as a complication or a sequela. We should not consider our treatment in these cases scientific and complete until we do use this preventive measure, for if we wait until the infection has invaded the delicate structure of the middle ear, we have gone too far for us to say we have thrown

around the patient every possible advantage.

In this short paper I have endeavored to present a few thoughts that if put into practice will save many children from deafness and from those grave complications of middle ear inflammation, viz.: mastoid abscess, meningeal and brain complications.

I respectfully commend these thoughts to you with the mental assurance that while simple they are worthy of the careful rumination of all who follow in the trail of progressive medicine.

Miscellaneous Remarks on Things Affecting the Craft of Railway Surgeons.*

By H. D. Stewart, M.D., Monroe, N. C.

Mr. President and Cofreres of the Association of Seaboard Air Line Railway Surgeons:

I propose to make a few scattered disconnected remarks for the good of all concerned except the critiques.

In the first place for what purpose have we come all the way to Tampa? We have come to this cigar town—this Spanish-American-Cuban city of the near tropics to do and to accomplish anything that is for the welfare of the Seaboard Air Line Surgeon, and for anything that will foster and further the efforts of the great Seaboard Air Line system in all of its work of industrial development of the Southland.

Railway Sanitation—Yesterday I noticed chunks of ice on a truck waiting for service to the traveling public. I did not have a microscope nor a laboratory. But I will venture to say that there were as many kinds of germs around and on that ice as the Indianapolis Board of Health recently found on an unscreened, unprotected porcelain fruit stand on a city street. Most of these germs are non-pathogenic, but some are deadly.

In further pursuance of the idea of sanitation I will say that passenger cars and sleepers should be thoroughly fumigated and disinfected at the end of each run to a terminal.

Many mothers will travel with whooping cough children, scarlet fever and other contagious diseases in spite of the devil. In this way they act as distributors of disease along lines of travel from town to town. All such careless, persistent mothers or nurses should be promptly run in and quarantined as soon as they are discovered.

Consumptives and syphilitics have free, unrestricted access to the cars, to the drinking cups and to the berths.

*Paper read at Tampa, Fla., meeting of Association of Seaboard Air Line Railway Surgeons, October 30th, 1912.

Water Closets of Railway Cars.—Some of the water closets on the day coaches are a disgrace to civilization. They are dirty and unsanitary in many respects. They are not decent. The railroad companies should be required by State laws to keep them clean and sanitary.

Each closet should have a flushing reservoir. There should be kept in each reservoir of water a disinfectant solution of sufficient strength of some coal tar product or bichloride or other germicide.

This would insure protection to the traveling public and those along routes of travel against bowel infection and genito-urinary contagio-infectious diseases.

The average Pullman car as well as the day coach is too close and stuffy. There is insufficient room and ventilation.

Cars that are built in the future should be made to meet all necessary requirements. There should be an additional dressing room about the middle of the car, on either side of the aisle. There should be a storage department for suit cases and grip. I have seen some badly injured feet, shins and heads from coming in contact with baggage in isles. Their presence in the isles has become a nuisance.

It is needless to say that every car of future construction should be of the steel frame type. This would save hundreds of lives each year and hundreds of thousands of dollars to the railroads.

There should be a State law prohibiting any person of ordinary averdupeis from occupying more than half a seat at a time while other passengers have to remain standing. A violation of this law should be a misdemeanor. If one human being is too good to sit by another, then the cars and seats should be classified. Or the human that is so much better than his neighbor might just walk or stay at home.

To facilitate the enforcement of this law racks for suit cases and other portable articles should be provided. And the conductor should be empowered with authority and required to see to it that no passenger has to stand as long as half a seat remains untaken by any person; suit cases and big hats notwithstanding.

The Pullman Company are somewhat unreasonable and exacting in their demands upon the railroads. They are as independent as the devil. The railroad company is responsible for everything—all damages to passengers and employees.

What are we, as railway surgeons, doing to remedy these evils of travel? Is it not our business to protect the traveling public as well as the employees and the railroad corporation itself?

What are we urging our State legislatures

to do to have these dangerous conditions of travel corrected or removed?

Most upper railroad officials have an honest desire to serve the public best and to protect their general welfare, both from a humanitarian standpoint and from the standpoint of competitive business advantage. But the financial idea and the idea of economy is so enlarged in the average general manager's brain that no extraordinary reform is launched and carried out without some suggesting, impelling or compelling force of legislation behind the proposition.

We have come to Tampa to read and to discuss papers that will make us better surgeons. The most important part of our meeting then is good papers and good lively discussions. We must not neglect this feature for politics, sight-seeing, a good time or anything else.

Organization caucuses and various side issues should not be allowed to prevent a good attendance at the literary meetings of the association.

It makes no difference who is elected President or Secretary or to some other office of the association. But it makes a vast difference how he is elected, and whether the manner, means and ways militate against the general welfare of the association.

The Railroad Surgeon's Duty to the Railroad Patient.—The railroad surgeon owes it to himself, the patient and the railroad to give his railroad cases the same faithful, painstaking service that he does his private patients. He must visit the patient twice a day, if necessary. He must dress his wounds often, if they are infected, unless they seem to be healing by first intention.

It frequently happens that a neglected minor injury becomes a major injury by spreading infection, by prolonged untreated, unnecessary shock or by neglect of a fracture or dislocation.

The surgeon's ability may be very much tried in the detection and proper reduction and retention of a concealed fracture or dislocation.

Many damage suits have come from the one cause of overlooking, or neglecting a fracture or a dislocation.

The Surgeon's Duty to the Railroad.—Every surgeon should be loyal and faithful to the system he serves. He should protect its every interest within the limit of right and justice. He should not lie nor be expected to bear false witness for the corporation. On the other hand he should see to it that imposters and deadbeats do not impose upon the railroad.

A corporation has no soul. But it has a head, a body, a heart and a tail. Particularly does it usually have a large brain of

very fine fibre of grey matter.

The general claims attorneys of most railway systems are disposed to treat their employees and the traveling public with fairness.

Causes of Damage Suits Against Railroads.—There are usually four causes of damage suits against railroads.

First. The injury *per se*, and possible neglect on the part of the surgeon to render prompt and proper service and to extend the necessary kindness and courtesy.

There is such a thing as treating an injured person so well that he cannot have the heart to sue the road, unless, as in some cases, he is meaner than the devil wants him to be. In which case he hurts the devil's cause as well as the railroad's.

In case of severe or permanent injury, which greatly lessens the injured person's earning capacity, the doctor, the claims attorney and all must treat the unfortunate one with equity and justice.

If a doctor passes off a case lightly or seems to have no interest in it, the patient becomes very much dissatisfied. If there happens to be a shyster lawyer (a legal solicitor, if you please) within whiffing range, a damage suit against the railroad arises.

The following story is told of a great statesman who represented North Carolina in the United States Senate for many years. He owed debts to the amount of one hundred and twenty thousand dollars. An expert collector was sent to his home time and again to try to get the accounts adjusted. The Senator always met him at the station with a handsome carriage and a pair of spanking bays or blacks. The Senator would drive him over his magnificent farm, wine him, dine him, introduce him to the ladies of the family, dance him, bewilder him, stun him with courtesy and kindness.

After the collector was on the train half way back home he would recall that he had been sent down to collect an account from somebody.

Then he would have to concoct a marvelous lie to satisfy his agency that he had made a bold, desperate, determined effort to collect.

There is such a thing as treating our patients so well they cannot sue. They will usually ask our advice about bringing suit. If there is little ground for suit, of course we will advise against a suit. If there is any real merit in the case, we may advise that the claims attorney will be considerate of their real deserts.

Second Cause of Damage Suits.—Shyster lawyers who have no special ability but are anxious to get some money by the easy route

are the cause of most damage suits.

They sometimes beat the surgeon to the case. They often beat the widow to the funeral. It is theirs to dissatisfy the one who has a cause, and to make even the one who has no cause bring suit against the road. It is better for the road and the injured, too, that shyster lawyers be eliminated from all cases.

One morning a very full fellow failed to get off the train at his proper destination. The conductor waked him and started him out. After the conductor had gotten his orders and the train had gone a mile the train had to be stopped to let him off. He was too drunk to walk, so he fell down and bruised his hip. I carried him to a boarding house near the station and put him to bed. He was both head-drunk and leg-drunk. Soon after I left him, and within one and a half hours after he got off the train a solicitor—a corporation lawyer—called to see him. He could not get the drunken fellow awaked, so he failed to get a case that morning.

Very often a big lawyer gets a little partner to use as a tool to do dirty tricks.

He wants damage suits and some other things. The big lawyer wishes not to put himself in a bad light before the public. He is willing to be crooked, but he wishes to conceal his crookedness lest it injure his social standing or his church standing.

He is very often an Amen corner attendant at church. Keep your eye upon this church crook of the legal fraternity. The big dignified partner with cane, long coat and stiff hat is keeping himself aloof from the approbrium of soliciting damage suits where there is no cause or no case. His little partner is a solicitor. He himself is a corporation lawyer. Often both these partners are as mean as hell and will steal from corporations or from individuals either, if they get half a chance. These fellows have the face to call themselves corporation lawyers. I know of one corporation lawyer of this kind that can't even define a corporation. There are some I don't know.

I ask this question: Which is worse, to crack a safe and rob it and be known as a safe cracker from the Bowery, or to beat some hard working fellow, some corporation, some doctor or some merchant out of money through a sorry damage suit, and the perpetrator of the deed pass as a gentleman?

Is it any wonder Pat could not understand how one grave could contain two individuals at once—a lawyer and an honest man? The mistake was not Pat's at all. The bereaved one who selected the epitaph repeated the article—a lawyer and an honest man—instead of saying a lawyer and

onest man. Pat was right in every sense.

The Seaboard Air Line has several nice residences in Mouroe. But they are not occupied by the Seaboard.

Third Cause of Damage Suits is poor tact on the part of claim agents. If a claim agent dilly-dallies, chews the rag with the claimant, quarrels, fusses, irritates, delays, gives a cool reception, fails to give due consideration to the merits of the case, some shyster lawyer who hasn't sense enough to make an honest living practicing law will get in his work. The case will fall into the hands of a "corporation lawyer."

Fourth Cause of Damage Suits Against Railroads is impostors, humbugs, crooks or rogues who happen to be employees or passengers when a slight injury is sustained.

There is a certain class of people who have the suing habit. They will call doctors to work for them, refuse to pay for services rendered and then try to sue the doctors to get something for nothing. Ungrateful wretches! They, together with shyster lawyers, will sue the middle of the big road, if there is any chance to beat anybody out of any money. They are in a class with pickpockets, safecrackers, highway robbers and other crooks. They always sue as paupers. Right here is where the judge fails to balance the scales of justice.

The judge should make every fellow who is not a pauper (and there are very few real paupers these days) give bond for the costs in the case. Otherwise a non-suit should be ordered. Better still, there ought to be a law enacted requiring damage-suit lawyers to give bond for the costs in cases that have no special merit. Counties and States are put to much needless expense and citizens to much expense and trouble in order that an ignorant, one-horse lawyer, with a dam-fool or a dam-rascal for a client, may make a living without working for it. Excuse the language. I have studied Latin, Greek, French and Anglo-Saxon, and there is no other language that will aptly express the thought above conveyed.

Every railroad should be made to treat its employees and its passengers with fairness and justness in cases of injury.

On the other hand every good citizen should consider it his bounden duty to help to put a stop to the many impositions placed upon railroads in bringing damage suits for nothing just because a lawyer is not making a living or needs some money.

The people ought to be taught that "Jones pays the freight." When damages are assessed against a railroad the money comes indirectly out of the assessors themselves—the jurors and their neighbors.

You can't head off the lightning calcu-

lators that man our great railway systems. They are men of brains and men of intellect—graduates of the great literary universities and post graduates of the great business schools.

"Jones, he pays the freight." Who is this fellow Jones? Jones is the ultimate consumer, the fellow who labors to produce but produces less than he consumes. The fellow who buys more marketable products than he makes goes through life staggering under a great burden. And when he falls under the load, it remains for the county, the city or charitable neighbors to take up the burden and bear his worn out body to the alms-house, or his dead body to the grave.

Every man from the manufacturer through all the middle men to the consumer is figured in the costs and the freight. But the ultimate consumer is figured against and charged up to all freights and all loss. The ultimate consumer has no other local unit to which to shift the costs of living. He is the jumping off place. The larger the number of middle men that have handled the manufactured product the greater the cost.

The only salvation for Jones is to produce more than he consumes.

Did it ever occur to you what a dangerous ulcer on society is the non-producing consumer? He is the most dangerous member to the body politic, the body social and the body ecclesiastic.

In our home county of Union there are less damage suits and better treatment of corporations than there were years ago. Time was when lawyers could win suits against railroads by appealing to ignorance and prejudice. Our citizenship is becoming more enlightened. There is a healthful, educated public sentiment in our county of Union that believes in a square deal for all and as little expense as possible to the taxpayers.

But take care for Anson county, our sister on the east. Sometime ago a palsied neurasthenic sissy had a damage suit against the railroad. Through the magnanimity and sympathy of the railroad officials he had been given a job as watchman at a railroad crossing. One day he became frightened at a passing train and fell down. He sued the Seaboard Air Line at Wadesboro and the jury gave him and his lawyers five thousand dollars. The lawyers took charge of the money. I didn't learn how much they let the poor fellow have, but I think it was one half or one-fourth of the amount procured. I understand one of the lawyers has since built a handsome residence.

Waste.—Railroads lose millions yearly by sheer wastefulness. Timbers, iron, sup-

plies to employees, unnecessary and avoidable wrecks. Everything that is stolen or wasted is charged to Jones, the ultimate consumer.

Many a railroad conductor has amassed a fortune through the cash fare route. I heard of one conductor who let the railroad have fifty per cent. of the cash fares, then twenty-five per cent. And when he was about ready to retire as a private banker and real estate man, he stole it all for a short space of time. At this juncture he lost his job. All these things militate against the welfare of the railroad surgeon. There is scarcely a ding thing left for him—not even a long distance pass for himself and his family.

It is just as wrong to steal from a corporation, a nation, a State, a county or a municipality as it is to steal from an individual, and the penalty and the punishment are just as sure. The penalty may not be inflicted upon the prime perpetrator in the penitentiary, or even in this life at all, but the same divine law is to be reckoned with. There is a punishment somewhere, sometime to some members of the tribe. Stealing is stealing. It is not right to steal from a man because he is rich. It is not honest to impose upon kin-folks or to let a debt go unpaid because you owe it to a relative, or because you think the person you owe doesn't need the money.

There is a divine writ against stealing one brownny from a million dollar corporation. There is a penalty. If the thief himself is not caught, his son or his grandson will be caught and punished. That is worse, for the lesson, than if the old man had gone on to the penitentiary at the start.

One other factor occurs to my mind as a cause of damage suits.

A generation ago lawyers were educated men. It was considered that no lawyer was fit to turn loose upon the State, unless he was well qualified with brains and education.

Now a young fellow from the plow, from the woods or from nowhere at all can pretend to take a six weeks course of reading and lectures, run by the board of examiners, snatch a license and come back home as a full-fledged attorney. The requirements are very slack. As a consequence the profession is becoming over-crowded with a host of incompetents who must take any crook or turn against individual or corporation to pay board and washing.

What the Railroad owes its Faithful Surgeons.—The surgeon at a small station should receive an annual system pass for himself and his family and a pass, by request, over foreign lines.

The surgeon at a division point or a

terminal should keep a strict account of work done and should make an annual report to the Chief Surgeon and to the Chief Claims Attorney or General Manager. He should receive fees according to a graduated scale. He should receive an annual system pass for himself and family and a pass over any foreign line for himself and family with Pullman service on request.

Two Congressmen have declared to inquiring surgeons that it is entirely within the law for passes to be given over foreign lines as much so as for conductors and engineers to be given passes. The surgeon is just as much an employee as these other servants.

We are confident that our Chief Surgeon and our General Manager are going to do better things for us. The interstate commerce commission cannot exceed the law as laid down.

It is more of a political organization than it is a government serving, people serving organization.

Our Chiefs have us at heart and better things are in store.

A mutual good feeling should be cultivated between the road and its surgeons for the good of all concerned.

Trusting that these rambling remarks may furnish food for thought and may bear good fruit, I thank you, one and all, for your close attention.

Pellagra.

By E. A. Bowling, M.D., Durham, N. C.

The cause of pellagra is as yet unknown. At the recent meeting of the Pellagra Conference at Columbia, S. C., it was decided by a vote of the conference that the cause had not yet been ascertained. There are theories galore and in the present unsettled state of our knowledge they can be nothing more than theories until we get a more definite understanding of the cause.

To my mind, there has not yet been a theory advanced that will fit every case unless we accept the germ theory. The semi-drying oils theory of Mizzell, the hook worm theory of Nason, the excessive sugar consumptive theory of Deeks, and so on, et cetera, all meet insurmountable objections when we study the cases as we see them in daily practice. My opinion is that it is caused by a pathological germ and I think that this germ first finds lodgment in the stomach, and the stomach has to be in proper condition for its propagation. I advanced the theory in a paper read before the last North Carolina Medical Society

*Read before the Virginia Medical Society Oct. 23rd, 1911.

that this condition was a total absence or a very great diminution of the hydrochloric acid in the stomach. I note since that time that several observers have found that in the beginning the stomach may contain a normal amount or even an excess of hydrochloric acid, so I am willing to admit that the theory was based on a wrong hypothesis; but this much has been noted by all observers so far as I have seen that in advanced cases there is *always* a total absence of hydrochloric acid. Another observation that I have never seen refuted is that in the beginning of a case of pellagra we have an increased motility of the stomach.

Now while we are not positive as to the cause, I take this much is known as to the effect of the cause whatever it may be, *i.e.*, we find an increased motility of the stomach, showing an undoubted irritation of that organ, and this irritation goes on to a low grade or we might say an acute condition of inflammation of the lining of that organ and it sears the glands that secrete the hydrochloric acid until they fail to secrete this very essential product of digestion. If this condition is found in every case then it gives us sign posts pointing the way to a logical treatment.

That there is a ptomaine generated, most probably in the alimentary tract and absorbed into the circulation, is to my mind very clear, and I account for the rash by the influence that this poison has on the secretions of the adrenal glands so that the secretion of adrenidextose is interfered with and the nervous system loses control of the lumen of the blood vessels and we have a stasis of the blood; it is certainly not an inflammation in the early stages, for we have no swelling, heat or pain.

To my mind, we cannot account for the various nervous phenomena on any other grounds than that the system is charged with a poison which acts as an irritant to the nervous system. These symptoms sometimes evince themselves by intolerable burnings or an unbearable sense of cold and in a recent case under my care to a most intractable pruritis.

Another reason that convinces me that a germ is the causative factor is that I am firmly convinced that the disease is in a manner infectious.

I have seen too much of the workings of the disease to permit me to come to any other conclusion.

As to treatment, not knowing the cause we are of a necessity more or less at sea as to the proper procedure in our treatment, and any treatment has of a necessity to be empiric.

Mizzell, of Atlanta, claims to cure very near one hundred per cent. of his cases with

calcium sulphide as a basis, and if others could get the same happy results it would not be necessary to go any further for treatment, but unfortunately some of the rest of us cannot attain these results. My experience has been that while I find calcium sulphide a valuable adjunct, my results do not approach the percentage of cures reported by the good doctor, where I depend entirely on the calcium sulphide, nor have I seen where other men's experience was so happy as his.

Nason, of Mississippi, gets very satisfactory results with the use of thymol given in almost heroic doses. Beverly Tucker, of Richmond, gets better results with the use of urotropine than any other drug, while in my limited experience nothing will benefit my patients so much as chlorine water given in teaspoonful doses every two hours.

In analyzing these various treatments it is plain to see that each one is an intestinal antiseptic. My reason for selecting chlorine water was that I believed the disease to be of germal origin. I was convinced that it first attacked the stomach, and I was equally certain that the pathological condition extended on down into the bowels; knowing that chlorine water was the most powerful harmless antiseptic in our possession, I selected it primarily for its antiseptic qualities, and after using it in a number of cases and noting its beneficial effect I have continued to use it, until now my cases number more than eighty and with very few exceptions it has benefited every case that used it long enough. The water should always be made fresh with a slight excess of hydrochloric acid.

I usually instruct my druggist to take gr. 40 chlorate potash, add to this four drachms hydrochloric acid and when the gas begins to be given off freely to add water sufficient to make eight ounces; of this I give one teaspoonful in water every two hours. As an eliminant I give castor oil one tablespoonful once a day; this, so to speak, destroys the feeding ground of the germs.

In my hands this treatment will not cure one hundred per cent., but of the forty-two cases seen this year there has been only six deaths, and four of them were old chronic cases that came to me as a last resort, and two of them I only saw once in consultation and they were hopeless when I saw them.

I only give this for what it is worth; it is the best treatment for my cases. Other men can cure equally as large and much larger per cent. of their cases with other treatment and I am not doubting that there is virtue in all of them, and I am convinced that the confidence which the doctor has in his

favorite line of treatment begets confidence in his patient, and this psychological effect has an undoubted bearing in the cure of the disease.

Some Remarks on Obstetrics; with Report of Cases.*

By W. C. Powell, M.D., Petersburg, Va.

Mr. President, and Fellows of the Medical Society of Virginia:

The remarks in my paper, as the title implies, will not pertain to normal, but to abnormal labor, the anomalies of labor, as it is from this class of cases that we learn the most. Any "old granny" may manage a normal case, when everything goes aright, but it requires the skill and best judgment of the experienced obstetrician to successfully manage the abnormal and complicated cases, which every doctor will at times see in his practice.

Among the anomalies in the forces of labor may be mentioned: 1st. Deficient power of the uterine muscle; inertia uteri. 2nd. Excessive power in the expulsive forces of labor. 3rd. Excess in the resistant forces of labor. 4th. Deformities of the pelvis. Comprehensive and satisfactory knowledge of the deformities in the female pelvis has only been gained in the last half century. It is difficult to estimate the frequency of pelves sufficiently deformed to influence decidedly the course of labor. Deformities of the female pelvis may be detected by the history of the patient, by her appearance, by palpation of the exterior and interior of the pelvis, and by external and internal measurements; the use of the pelvimeter. 5th. Tumors of the genital canal; carcinoma of the cervix. In a large proportion of cases, cancer of the cervix interrupts gestation at various stages, but in a certain percentage (sixty-six, according to Muller) the pregnancy goes to term. Fibroids of the uterus and cervix, low enough in the situation to be incarcerated in the pelvis, are likely to constitute insuperable obstructions in labor, besides complicating parturition by favoring abnormal positions of the child, by predisposing to adherence of the placenta, to prolapse of the extremities and cord, and to hemorrhage during and after labor. 6th. Excessive overgrowth of the fetus. The causes of overgrowth of the fetus are prolongation of pregnancy, oversize and advanced age of one or both parents and multiparity. Overgrowth of the fetus is the most difficult condition in obstetric practice to diagnose with precision. No single rule of treat-

ment can be laid down for the management of these cases. Forceps, version, or some form of embryotomy is usually demanded. Spontaneous delivery, however, is possible even in cases of monstrous bulk, in which delivery through the birth-canal would seem impossible. We come now to the report of my cases:

CASE 1.—Xiphopagus, or double monster. This case was reported by me in the Virginia Medical Semi-Monthly of December 23rd, 1904, as follows: Mary P., colored, age 38, multipara, was taken in labor on Sunday, September 11th, 1904, at 3 p. m. I was called by 'phone, and, being out of town, Dr. L. S. Early was called in, and upon arriving and making the usual examination, he found a breech presentation, four feet presenting. Thinking he had a case of twins to deal with, he determined to wait and give nature a chance. As the labor progressed he discovered there was only one body. The four arms were brought down, and the two heads coming down, resting against the pubic arch, stopped there. Thinking he would have to amputate one of the heads, he sent for his instruments, and, while resting and waiting, the two heads were born spontaneously; two full-term, still-born, twin girl babies, having two heads, four arms, four legs, and only one body. There was only one placenta. The thoracic and abdominal cavities were united, the ribs extending across from one to the other. The mother made a good recovery, and has since given birth to two normal, healthy babies. The father of these babies was half white, and the mother a full-blooded African.

CASE 2.—Hydrocephalus is the most important of the diseases increasing fetal bulk. It is not very rare; Schuchard found it sixteen times in 12,055 births; is often overlooked, and a frequent cause of ruptured uterus. Hydrocephalus should always be suspected if the head, in labor, remains above the brim, although the pelvis is normal in size and no good reason can be found for the failure of engagement. The writer has seen one such case:

Mrs. R. H., white, age 30, multipara, was taken in labor at 4 p. m., June 14th, 1908. I was called at 7 p. m., and, upon examination, found a breech presentation. She was bearing down her pains well, and appeared to be in great distress. The labor progressed rapidly, and at 9 p. m. the child was born, except the head, which appeared to be very large, and freely movable within the uterus. Several times the forceps were applied, and each time they slipped off. I sent for another doctor, and, upon consultation with Dr. E. J. Nixon, we decided that the head could not be born, and that

*Read before the Virginia Medical Society Oct. 23rd, 1911.

we would have to resort to operative measures. With a pocket knife, sterilized, I proceeded to do a craniotomy. Introducing the knife with the index finger of my right hand as a guide, I made an incision into the posterior fontanel, cutting both ways, when the water gushed out in a large quantity, reducing the size of the head, which was then easily delivered. The woman lived five days, and died from uremia.

CASE 3.—A child born without arms. In a careful search of the literature, I have failed to find anything like it described in the books. Mrs. W. B. P., white, age 30, primipara, was taken in labor at 4 p. m., February 22nd, 1911. I was called by 'phone at 7 p. m., six miles from town; arriving there at 8 p. m., and making the usual examination, found a breech presentation. The os was dilated to about the size of a half dollar. The bag of waters had not yet ruptured. The woman appeared to be in a normal condition, and I determined not to interfere unless necessary. She bore down her pains fairly well; and at 12:30 a. m. a male child was born, which appeared to be well formed, with the exception that he had no arms; two miniature hands coming off from the shoulders, somewhat resembling the wings of a young bird just leaving the nest and beginning to fly. The child lived about twenty-four hours. I never knew the cause of death. The mother made a good recovery, and, ten months later, I delivered her of a healthy child.

CASE 4.—Hermaphrodite, with ectrophy of the bladder and double inguinal hernia: Mrs. M. L. H.: white, age 18, primipara, was taken in labor at 10 p. m., November 18th, 1911. I was called by 'phone at 4 a. m. the next morning, and arrived at 5 o'clock, and, upon examination, found a breech presentation. The bag of waters had not ruptured, and the woman appeared to be in good condition. I ruptured the bag of waters, the os being well dilated, and the labor proceeded very nicely, when at 7 a. m. the child was born. I could not tell whether I had a boy or a girl; the sex was so evenly divided that I was unable to say which predominated. Many operations have been suggested for this condition, which is caused by a failure of the abdominal wall and pubic bones to unite in the median line. The condition of a patient with ectrophy is pitiable, the urine leaking constantly, and the protruded vesical mucus membrane being liable to inflammation and ulceration. When the child cries the urine can be seen to issue from the ureters in jets. Upon consultation with Dr. J. G. Rennie we decided against any

operative procedure on account of the frail and delicate condition of the child. The treatment in this case was simply supportive and protective, with the use of sterile gauze and adhesive plaster, with antiseptic and aseptic precautions. The child lived forty days, and died from exhaustion. The mother made a good recovery.

To recapitulate: All four of my cases were breech presentations. Three of the four were of the white race, and the other one one-fourth white. Two of the four were primipara, and the other two multipara. I regret that I haven't the pictures to show you. I thank you.

No. 2 Bank Street.

The Medical Profession's Responsibility for the Use of Proprietary and Patent Medicines.*

By L. N. Glenn, M.D., Gastonia, N. C.

A thorough discussion of the above subject would be entirely too lengthy for this time and place, and I shall necessarily abridge my paper by attempting to present only such phases as to my mind appear most salient.

Let us exclude from this paper such agents as are recognized as ethical and of genuine merit,—manufactured by honorable houses and unquestioned by the best of the profession, remembering at the same time that our neighbor, Somnos, is exploited by one of these same houses.

Let us consider first Proprietary and Patent Medicines,—Character and Extent.

Within the space of only a few short years, we find the number of these nostrums to have greatly multiplied. Each has its introduction to the laity via the sample route,—rejoices in its zenith, wanes from its popularity, and after a few days of grace, bows a reluctant farewell, while its promoters have but to either re-label it and introduce it again, or introduce a new one. We have seen them run their course and disappear,—others are now in their glory while the future only remains to supply them to our children and our children's children. We are not exaggerating when we say they are exploited everywhere. Our cities, towns and villages are constantly being deluged with samples, while our rural districts through the mails are likewise treated to a liberal supply of the same. Almost every conceivable ill that the human family is heir to has its particular panacea, lauded in unstinted terms, while every known drug and many things which cau-

*Read before the recent meeting of the North Carolina Medical Society.

not be recognized as drugs have their specific field of usefulness, and according to the irresponsible vendor who exploits them that field of usefulness is only limited by the confines of the universe. Solutions, mixtures, emulsions, powders, capsules, pills, ointments, poultices, lotions, etc., each meekly bows to its part in the shame.

Most of them contain a little syrup, a little sugar of milk, or a little coloring matter, very little real medicine of intrinsic worth, and the ever present alcohol or dope which only lulls the poor ignorant, gullible victim into a state of false relief and paves the way for a willful indulgence.

Responsibility Incumbent. Is it or is it not?

Some one might dissent and claim that "A man is a man for a' that and a' that," and that it is his own privilege to do as he pleases.

For ages and ages the world has gone to the legal devotees for opinions on legal matters,—to Bible students and the clergy for facts bearing on religion,—to farmers for knowledge as to farming, and thus have set up by common act, custom and consent the common law that our contention, that we are responsible, is correct, in that we are the ones to whom the world looks for opinions on health and medical matters. Practically every civilized country on the globe has in one way or another recognized and licensed physicians.

Discharge of Responsibility,—Teaching.

We may approach this subject from every conceivable angle and yet cannot avoid the conclusion that the discharge of our responsibility lies in teaching, in enlightening the laity, cultivating and crystallizing public sentiment, and especially that of the youth of our country, and in bringing them to an actual realization of the dangers incident to the use of these nostrums.

First of all let us look to the doctor himself. Before he attempts to fill the important position in society to which his chosen profession has assigned him, he must necessarily be competent. Our State Boards of Medical Examiners are most wisely endeavoring to admit to our profession not only men possessed of medical knowledge but men who have that associated with genuine honor and true manhood. Let us hope that the profession will be saved from the company of the doctor who buys stock in the John's Pill Company, and then proceeds to prescribe John's pills sold at so much per, while he pleasantly awaits his divided check from the concern. How about the man who would thus commercialize the confidence reposed in him by a pa-

tient, and yet we have them in North Carolina.

He must have carefully surveyed the field that he is to care for and thoroughly fitted himself for its care. The physician who is so ignorant that he has to, or is so lazy that he prefers to, re-label a package of patent medicine and pass it on to his hapless patient is manifestly unworthy to belong to the honorable profession which he is so grossly dishonoring.

Likewise the physician who permits the sorry fellow who has failed to succeed in the profession of medicine, either from ignorance, dope, whiskey, laziness or what not, and who has gone on the road, to glibly extol to him the impossible virtues of his special nostrum is even more culpable. It is an outrageous insult to the honest physician who aspires to live up to the requirements of his noble calling to have these sorry, unscrupulous, designing representatives tell and advise him what to prescribe, pollute his office with their so-called elegant preparations and attempt to financially fatten at the expense of the poor victimized patient whose innocent stomach would be made a cess-pool for these elegant samples. He gratuitously tells you what you think and what he knows, when as a matter of fact neither of you know the contents of these packages. He would have you consider him an evangel who had by some very special act of Providence fortunately passed by your way to enlighten you. This is more especially true in the case of the young doctor who is just beginning his career. He is considered an easy mark and is given especial attention by these same benefactors. We usually find at our annual meetings that the local committee of arrangements has been most graciously assisted by these fellows in that the nooks and corners, or corridors, of the buildings are elaborately decorated with their various samples. Thanks to our Hendersonville brethren, who have so nicely taken care of us without their assistance.

Who of us know the contents of these packages, put up expressly for the coin by men of whose character and of whose knowledge of medicine we know absolutely nothing, and whose identity is even not always known.

This leads us to consider what we must prescribe and through whom. Study closely the pathological condition to be dealt with. Study closely the elementary drugs known to the profession, then prescribe as near as possible the right drug, having a specific and definite reason for so doing. Do this and expect results.

Here we may admit to our armamentarium such things as are of true known value.

Dover's powder, paregoric, and many other combinations of drugs were once proprietary but their constituents are well known drugs of unquestioned worth, and we make no criticism of their use.

The proprietary and patent medicine man insists that we haven't capable druggists to compound our elementary drugs, hence the necessity for him. Only too often is it true that our so-called druggists are very incompetent, but certain it is, that to some extent the fault is ours, in that we do not require them, so long as we are content to let the vendors supply our nostrums ready made and require nothing of the druggist.

We doctors slave along day and night for some drug store and are peacefully submissive while the fake druggist supplies and persuades our patients to buy his ready made junk rather than let them be scientifically examined and intelligently prescribed for by reputable physicians. Pardon the slang, but "That's gratitude."

Let us devotees of one of the noblest callings teach the laity more about the laws of health. Instill into them better ideas of sanitation, hygiene, ventilation, light, heat, diet, sleep, exercise, and systematic living. Teach them something of the intrinsic merit both of good and bad medicines, and enable them to think intelligently of drugs and health matters in general. Then whenever we reach the time when we have an enlightened clientele along the line of health matters, their own capable judgment will steer them free from the multitudinous nostrums which disgrace our profession today. You will frequently find the parents of a family perfectly satisfied with the application of Gowan's Pneumonia Cure to a sore toe, or the old man taking Wine of Cardui for rheumatism, and will be unable to institute proper treatment. But if you will enlighten their ten- or twelve-year-old children concerning these ignorant absurdities, you may confidently hope for a better future. Teach your patient the fallacies associated with medical matters, the inconsistencies, the indications and contra indications for prescribing and think how very seldom you are justified in withholding facts concerning his condition from him. Enlighten him to the extent that he will call on you for more enlightenment and thus eradicate the ignorance which prompts him to seek the ever present nostrum with its endless detrimental effects.

If we be worthy successors to the pioneers of medicine in our land, we will never acquiesce with the continued ignorant demand of the laity for all sorts of quackery, but will bestir ourselves, live up to our opportunities, meet our obligations to our fellowmen, both of the laity and of the pro-

fession, and after having been teachers as well as doctors, look the fake medicines squarely in the face with a consciousness of duty well performed and enjoy the sweet consolation of having faithfully discharged "The Medical Profession's Responsibility for the Use of Proprietary and Patent Medicines."

Hysterical Phobia in a Child. The Principles of the Treatment.

By Tom A. Williams, M.B., C.M., Edin., Washington, D. C., Corresp. Memb. Soc. of Neurol. and Psychol. of Paris, Neurologist to Epiphany Free Dispensary, etc,

A boy of eight years was seen with Dr. A. R. Tynes, at Staunton, Va., in the autumn of 1911. The preceding May he had developed what his parents called hallucinations, which occurred when he was alone only, for he would go errands and play about if he knew he was in sight of anyone at all. There were no night terrors, although he feared going to bed alone, and his mother or father always accompanied him upstairs. Whenever he was alone a spell would occur. The hallucinations were accompanied by a loud cry and a twisting backwards of the neck and contortion of the body. He was rarely still, wriggling about nearly all the time in an excitable fashion. His father and maternal uncle are declared to have had similar attacks in childhood. But it could not be ascertained that the parents had not spoken of some of these before the boy. The mother was over-anxious, "hysterical," and very uneasy when the boy was out of her sight, of which the boy was well aware.

Examination revealed no physical signs of disease of the nervous or any other system. In anamnesis, I found him a sensible little fellow, and I ascertained that it was a snake which he usually saw, although sometimes a wild beast would be seen. His shout was really the name of the animal he saw. He could not describe the snake except to say its head was like an eel. He remembered well the first such occasion of fright, and the creature then was not a snake, but a rooster. He declared that he was never actually afraid of any animals. Indeed, on one occasion, wearing a red sweater, he chased a bull away with stones. On another occasion, he went into the cellar to look for the bogeyman. He said that his only fear was that of being whipped by his father when he was naughty, and that of this he was "not very frightened."

I could not, in the short time at my disposal, penetrate the psychogenesis completely. My questions soon showed that the hallucinations were not true ones; for when I asked the boy if when he looked

around there was really an animal jumping on his shoulders, he had to reply "no"; and that he never actually saw, heard or felt what he feared. He then spontaneously declared "I reckon my imagination gets away with me." I then asked him "Why do you look around each time you fear the animal behind you?" He said, "It does not give me time to think of it; it comes so quickly sometimes, and I shout and run before I can recover myself." When asked, however, he said he was not easily startled as a rule.

Diagnosis and Prognosis.—Familiarity with the mechanism of terrors of children enables one to interpret this boy's case as a phobia against being alone, produced by the foolish anxiety of his mother. This affective state was an induced one, therefore, produced by the idea of some "dreadful consequences" which might occur to a little boy when not protected by his elders. But the morbid reaction had become a habit, so that even though the initial cause were suppressed, training would be required to overcome the facile inductibility of the terrors. Inhibition of his undue impulsivity should also be undertaken.

Treatment.—Accordingly, the following procedures were outlined, and the reason for them clearly explained to the boy and his father. Firstly, he must gradually accustom himself to go out alone, first for half a block, then for a whole block, and finally round the corner. While doing this, he could hold himself in hand, his attention fully awake to the need of manly behavior and the importance of recovering from his timidity. Secondly, he must learn to go to sleep without any one else in the room, remembering what a nuisance is a boy who cannot forego keeping one of his parents constantly at home in the evening. Thirdly, he was shown exercises in slow movement and mobilization by which he could suppress the wriggling tendencies of his limbs and body. His mother should be dealt with rationally, too.

Wishing to obtain more precision as to the psychic mechanism, I wrote to the boy asking him to tell me whether he seemed to be in a dream-like or in an absent condition when the fears assailed him. I also, of course, wished to stimulate the practice of the re-educative procedures I had prescribed. The following reply was made, and I recently heard from Dr. Tynes that the boy remains well:

"Dear Doctor: I have your letter. I do not see any animals since I saw you. I never did hear or feel them, but used to see them. It is not like a dream. I hope I can soon write you I am well. Your little friend."

I heard from the father of the little boy that he undresses and goes to bed alone, and is getting a good hold over himself.

The Diagnosis of Hysteria.—The mode of treatment of which the case is an example must be founded upon an accurate diagnosis, more especially where organic or functional disease is present in addition to hysteria. Indiscriminate use of persuasion, however rational, will bring only discredit to the physician who employs it. The most careful discrimination is required in some cases to differentiate that portion of a syndrome which is psychogenic. And where organic disease of the nervous system is what is simulated, an exact and wide knowledge of neurological signs is essential for a correct diagnosis. For, although hysteria may resemble apparently closely the condition produced by an organic or functional disease, differences always exist, which can be detected, however, only by one versed in minutiae of clinical neurology. For certain aspects of these, reference may be made to the writings of Babinski and his followers, and to the author's *Nature of Hysteria*, International Clinics, 1908; *Simulation of Hysteria*, Amer. Jour. Insanity, 1910; *Reflexes in Hysteria*, Month. Cyclo., 1910; *Essential Differences of Hysteria and Psychasthenia*, New Orleans Med. Jour., 1909; *Hysteria and Pseudo-Hysteria*, Amer. Jour. Med. Sci., 1910, etc.

Therapeutic Means.—The methods which have been used to attack hysterical fixed ideas may be divided into the following four categories:

1. *Mystical Impressions.* This has been used in all ages with powerful effect, even upon those who are ostensibly among the most highly educated. A consideration of the mechanism of this method would lead me too far in what is a practical therapeutic presentation.

2. *Suggestion direct or indirect, whether in hypnosis or not.* This method is a very crude one, merely aims at removing a symptom by side-tracking it by using a mental mechanism quite similar to that which has caused the symptom. It is as short-sighted as the giving of morphine for the pains of appendicitis; for it merely masks and thus perpetuates a condition at the root of the trouble. Moreover, it often fails to remove the symptoms against which it is aimed, a fact beautifully illustrated by cases. When successful it is often only fugitive, and the relapses are tenacious.

3. *Emotional Appeal.* It is uncertain if this measure, in its purity at least, is ever the effective force in the transformation of a hysterical symptom; for it is impossible to divorce it from the ideational element, upon which it must always rest, even in the most

primitive beings. Many psychopathologists believe the contrary, because of the fact that cold intelligence is powerless in therapeutics, and requires for a dynamic result the affective constituent needed for conation. But a little reflection makes it clear that the effect is, so to speak, only the background of the idea, and that the act or thought (for they are the same psychologically) which ensues upon psychotherapeutic intervention takes its direction from the idea by which it can be differentiated from other ideas, of like affective quality, but very different in their effects in accordance with the difference of the controlling idea they present.

For instance: A good example was the cessation of a young woman's infatuation for her lover as soon as the idea of his handsome attractiveness was substituted by Professor Janet by the idea that he was repulsive. This was accomplished by the suggestion that she would be unable in the future to picture her lover's face except in the form of that of a pig. Here, the affective difference towards this man was not produced by direct emotional appeal, but resulted purely from a change of ideas. Another instance on a large scale is the transformation of many a man's normal affection towards woman into a loathing for her on account of the teaching of the church that she was unclean. The efficient factor in this transformation is the idea. The men still have the same feelings, but they are perverted from their proper end towards an ideal by a conceptional difference not essentially affective. Business morals, too, afford instructive examples.

4. Rational Persuasion, Comprising Enlightenment and Re-education; Motor, Sensory and Psychic. Although psychoanalysis of the whole of a patient's life is very rarely required, as cases clearly show, yet it can be spared only in proportion as the investigator possesses (1) the diagnostic differentia of nervous disorder; (2) knowledge of psychopathology and (3) finesse in anamnesis.

Even if the pathogenetic factor is not found by these means, yet reconstruction of the patient's attitude can be begun. In many cases, this is best accomplished by the patient's own physician, but there are some patients who require the frequent adaptations only possible to a psychotherapeutic technician of experience.

It would require far too much space to give therapeutic details or even principles here, although it is unfortunate that there is so far no clear and succinct presentation of the subject. (A short presentation was made to the Neurological Section of the A. M. A. and should appear in the transac-

tions of 1912 session, and J. A. M. A. 1912). However, most psychotherapeutic literature is concerned with what is really hysteria, although it is often presented under other names.

The most important essential of the successful therapist is that he thinks not in artificial categories, but in terms of dynamogenesis, and this not only as regards the source of the patient's hysteria, but equally so as regards the means of disencumbrance to be used: No treatment should be attempted until a clear diagnosis is made. The patient's co-operation should be enlisted from the first, even although full enlightenment may not be expedient, at the beginning. But, of course, strong meat is not for babes, and the dose of psychology must be strictly adapted to the understanding of the sick one.

After all, psychotherapy is merely a combination of special knowledge with good sense and honest purpose. Until these qualities are more common or more readily available, a large number of hysterics will continue to drift from the physician by whom they are not relieved to the Faith Healer and other charlatans, whose suggestions they in turn undergo with little more benefit on the whole; for the temporary relief they often obtain is usually at the cost of an increased hysterizability, which is certain to show itself later, if not in symptoms of physical appearance, at least in psychological instabilities most detrimental to the society in which they live. Hence, it behooves the medical profession to instruct the coming generation in the psychological principles which are the groundwork of a prophylaxis and therapeutics of the most prevalent of all human tendencies, hysterizability.

1705 N Street.

Chloroform in Obstetrics.*

By F. G. Hodgson, M.D., Atlanta, Georgia.

The object in bringing this subject before you this evening is especially to emphasize some of the contraindications to the use of chloroform in obstetrics.

It is only during the last few years that the dangers of chloroform have been scientifically studied. The work of Cragin and Hull at the Sloane Maternity Hospital in New York was the first to call general attention to the danger of chloroform in cases of eclampsia, and their work was very convincing. In studying the pathological conditions found in cases of delayed chloroform poisoning and cases dying of toxemia

*Read before Fulton County Medical Society Nov. 7, 1912.

of pregnancy or eclampsia they found many points of similarity; especially in the changes found in the liver and kidneys. In each of these conditions they found evidences of congestion, cell degeneration and necrosis. Then they experimented upon dogs, rabbits and guinea pigs. After administering chloroform to animals for 30 minutes to 1 hour, they were killed and autopsied; changes were regularly found in the kidneys and liver due to congestion, granular and fatty degeneration and necrosis. After more prolonged use of chloroform these changes were more pronounced. They thus found in eclampsia, toxemia of pregnancy, delayed chloroform poisoning in man, and chloroform anaesthesia in animals very similar pathological conditions. In order to determine if ether was safer than chloroform, ether was administered to animals from 2 to 3 hours. The animals were then killed and autopsied. In none of these was degeneration or necrosis of cells found in any of the organs.

Impressed with these facts, they decided that the use of chloroform was unjustifiable in any cases with symptoms pointing to toxemia of pregnancy or eclampsia. Formerly chloroform was used in all cases of eclampsia at Sloane Maternity to control the convulsions and also for any operative procedure that was necessary. The mortality of eclampsia was then 25%. Now no case of eclampsia receives any chloroform at all. Ether is used instead and in the last 20 cases the mortality has been only 5%.

A number of articles on pernicious vomiting of pregnancy have appeared in the past year and the best authorities say that chloroform is contra-indicated when any operative procedure is undertaken in this condition.

At a recent meeting of the Washington Obstetrical Society chloroform was condemned in all cases of toxemia of pregnancy and eclampsia.

I reported to this society about a year ago a case of sudden death during delivery which was apparently due to chloroform, and other such cases have been reported.

Having before us, then, the facts that chloroform acts as a poison to the cells of the body, especially the liver and the kidneys, that it may cause either sudden death or delayed death, that it tends to increase any form of toxemia which may exist in a pregnant woman, are we justified in using it? I personally have abandoned its use entirely.

Chloroform has the advantage over ether that patients take it more readily, get under its influence quicker and react quicker. It is more convenient for the doctor to carry

and to use. This does not, however, justify us in using it. Our own personal comfort in this matter must be sacrificed to the greater safety of our patients.

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The Application of Chemistry to Clinical Medicine.

It has long thought that the therapeutic value of cod liver oil did not rest upon its abundance of fatty substances, for while the advantage to be secured from the employment of fats in emaciation and general debility was truly appreciated, yet it was believed that it was to other elements that cod liver oil owed its acknowledged worth.

With an increasing chemical knowledge of cod liver oil, it became an obvious fact that the essential principles of the oil could be separated from the whole product without the loss of therapeutic power in the process, or, in other words, that these isolated principles when applied clinically would produce the effects hitherto secured from the entire oil. It was this practical fact together with the realization that in a vast number of cases any potential value possessed by the oil was more than neutralized by the distress occasioned when a defective gastric apparatus attempted to digest the entire greasy mass, that encouraged chemists to apply themselves to the task of extracting the essential principles and thus relieve the stomach of the burden. In short, chemical science has enabled the patient to secure the every therapeutic virtue possessed by cod liver oil without being forced to digest a large amount of fats. Cord. Ext. 01. Morrhuæ Comp. (Hagee) has long been recognized as the highest type of cod liver oil preparations, for results show that although it lacks the fat which makes the crude oil so unpalatable, yet still retains those principles upon which the therapeutic value of cod liver oil depends.

Pneumonia.

The area of congestion and consolidation the pain, the pyrexia and the dyspnoea of pneumonia are promptly mitigated by the employment of Glyc-Heroin (Smith). The action of the heart is sustained and the successive stages of the disease are considerably curtailed.

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EDWARD C. REGISTER, M. D., EDITOR

CHARLOTTE, N. C.

"IN THE MIDST OF LIFE THERE IS DEATH"

Is a pessimistic view. The time is coming when sane citizens will optimistically realize that in the midst of death there is life. Taking cognizance of the origin of disease, its mode of dissemination and the percentage of its fatality should give rise to a consciousness of work undone. Truly, has it been said, "Men may rise on stepping stones of their dead selves to higher things." The decimating plagues, the invaliding tuberculosis, the pestilential malaria, the dietetic beri-beri have slain their thousands, but who shall say in the light of the countless ages to be lived, that all has been in vain? From etiology to prevention is a natural step. To ascertain the causes by a study of the conditions attendant upon the various maladies to which human flesh is not heir, but has thrust upon it, we are dependent upon the correlation of seemingly isolated researches in all parts of the world.

The significance of the new school of medicine lies in its recognition of the common good. No longer is the individual the sole object of medical care. The family doctor is giving place to the municipal doctor and the State doctor. Prevention will save its tens of thousands, where cure has saved its hundreds. Medicine is expanding, physicians are contracting; the welfare of the many is bound up in the diligence, perspicacity and skill of the few. The "single touch of nature that makes the whole world kin" is found in the love of life. Self-preservation is appreciated as involving the preservation of the multitude.

The curing of a patient from typhoid fever is all that the patient asks, but society demands to know whence the infection came and how the community may be protected. Prevention is the work of the future and while each man serves his families and endeavors to bring them back from the edge of the chasm overlooking the Valley of the Shadow of Death, his greatest work will be in overcoming those forces and powers that pull and push the human race towards possible extinction.

GARDENS OF PHYSICIANS.

This fascinating topic is for the physician in a peculiarly personal sense. The Pennsylvania Medical Journal for August says

that not only flowers of plants used in our therapy should interest us florally but that their study will amuse and entertain us aside from that. This is true. The Religio Medici and Garden of Cyrus by Sir Thomas Browne, and his Hydriotaphia (Urn-burial) will arouse us. The mystery of heubane, belladonna, digitalis, doctrine of signatures, and selection of mandragora throw a fairy light upon what some days to our enervated minds may appear barren and dreary. All the romance and wonder of life in its preservation and its exit and entrance belong to us. We forget this as we dress the ulcer and set the bone. Let us plant flowers now and then and read our history. Such pursuits are not ignoble! And they will make us better doctors as well as bigger men.

MUSCUM LAGTEMQUE GANAT.

In the issue of February, 1912, the editor of the Medical Times remarks upon the fact that Mr. R. I. Smith in one day caught 40,000 flies by the use of plates (he used six on this occasion) filled with a mixture of water and milk to which some formalin had been added. This procedure is quoted from the North Carolina Bulletin, the organ of our State Board of Health, and seems to amuse as well as interest the New York commentator, who evidently is acquainted with the economy of scrub-pails and wash-tubs, for he adjoins the note of the value of soapy or opaque solutions which "seem to invite a fly to sit down." They do just that, as the doubting Thomases may observe if they will next Monday. One ounce of formalin to sixteen of the water and milk, says Mr. Smith, will suffice to end the fly's misery—(and ours!).

DEATH PENALTY ABOLISHED.

This, Ohio has recently done, and enacted life imprisonment as a substitute. The action of the State of New York in appointing Dr. Richards to supervise the examination of all criminals in the hope of removing any reflex causative will arouse comment here. Crime is crime. The Southern States stand very near to the common law of England. While France at one time refused to execute, following the modern trend in Italy and Switzerland, as in some of the northern sections of this country, France has re-enacted a death penalty law. It is significant that Blackstone speaks of the practice of post-executory dissection. He refers to a specimen warrant as ordering the penalty of being hanged by the neck and afterwards "anatomized and dissected." There is a strong sentiment toward inspiring fear in the breast of the prospective criminal. The death penalty is not designed to hinder the perpetration of un-

premeditated or of involuntary crimes, and therefore the need of preventing such by the evocation of fear is not to the point. Premeditated homicide, a murder of the first degree does seem to be amenable to the possibility of aversion through fear. And the common law as interpreted in Carolina medicine accepts this sentiment. The recent action of medical men in New Orleans to the effect of a resolution favoring sterilization of criminals parallels the feeling in New York State.

Carolina used to castrate its runaway slaves for a second offense. Fear is the beginning of wisdom, the philosopher tells us. The days of Attic civilization record similar laws. This will amuse the careful student in so far as the sterilization for production of fear in prospective criminals is concerned. He knows that of such men, a major percentage of them is of the order of sexual perverts, and who do not care to propagate, so that of those who are able and desirous to establish normal sexual relations the successful ones deserve our sympathy and aid rather than opposition. The others will scarcely be deterred by any moral storm of fear or any other emotion. It is the best of a bad class whom we may injure. Tables showing bad strains of these people propagated numerously ought to mean only what they stand for: isolated cases, and not statistical values. We need bigger charts than these to reason from.

THE REAL SPECIALIST.

That men should specialize in the practice of medicine is only the natural consequence in the progress and evolution of this profession, and it is altogether appropriate this should be so. It is not reasonable to expect that a man, whatever his preliminary qualifications, will be able to perform a laparotomy, refract the eye and care for a case of placenta previa with the same degree of confidence or skill, for while one may admire his resourceful technic in the first instance, the veriest charlatan might impress one with a superiority in the second. In turn, the neurologist would possibly be as apt to ascribe a frequency of micturation due to cerebral disturbance as to cystitis or urethral caruncle.

The diversity of responsibilities demand the attention of the average man—the care incidental to collections with one of moderate means; critical professional cases; the welfare, physical, educational and social of his children; domestic affairs as, perhaps, supplies for the table; fuel; rent coming due; current events; social demands, etc.; each insignificant in itself but as a whole disrupts the continuity of thought more or less essential to professional success.

It is therefore reasonable that a singleness in point be selected in the hope of scientific betterment.

Our older specialists, as a rule, were creatures of circumstance and not selection; but this is, in a sense, happily vanishing and natural tendencies are now being consulted, and if this is overlooked failure may be ascribed largely to misdirected effort.

A man's natural bent may be to that of a plumber, vegetarian, democrat or Presbyterian—everybody is good for something and while some of us have been quite unintentionally thrust into the world, having arrived, we must needs develop traits according to the complexity of heredity habits and surroundings—this does not mean that education, which being interpreted, is merely mental enlargement, would not increase latent proclivities or even uncover unsuspected ones, it is only a long way of repeating the old saw, "That man will succeed best in the direction to which his natural capacities tend.

Having, however, established a necessity for the field of specialization, can it be said that the specialist will find something wrong with an individual case; will the Eye and Ear man discover that one eye is three inches shorter in vision in a ten foot range than its fellow—will the Heart and Lung man discover that there is almost a half inch area in the apex of the right lung that is filled with caseous material and to that extent, therefore, useless; also that there is a microscopic adhesion of the diaphragmatic pleura on the same side.

Will the Orthopedic specialist discover that the sole of the left shoe wears upon the inside edge and the sole of the right on the outside, which shows a marked disturbance of equipoise, accounting, no doubt, for the backache, the "corns" or the prolapsus uteri as the case may be.

Will the stomach specialist find out that beefsteak is digested in two hours and twenty minutes instead of three hours according to ritual—will he see that some agency is at work in the nervous makeup, that, in all probability, quickening the activities as it does, is hurrying the patient through life needlessly and therefore the neurologist must be consulted. Golf, cream, thin soup and light reading is the result instead of wood splitting, chops, boiled dinners, magazines and, perhaps, scientific books as heretofore.

After being spectacled, splinted, braced, dosed and bossed, death may be expected to occur at a decent and reasonable time, avoiding the ignominy of lingering around, in crass ignorance of all these things and putting the family to the shock and uproar incidental to a fall down stairs and a broken

neck at the age of 98.

Inasmuch as the makeup of man is probably never in balance as regards equality of dual organs, it is not assuming much that this fact should be discovered; marked disturbance, making this evident to the patient is, however, *usually* dependent upon some lowering of vitality or some want of nervous and physical elasticity,—is, in short, primarily of constitutional introduction; the first organ to suffer is, therefore, the weak one and when this weakening occurs the time has come to consult the specialist. But let it be the specialist who must scrutinize every department of the system; whose decision must be unbiased by observation of a single organ or its difficulties and who must know his patient from toe to crown—and this is the General Practitioner—after which comes the final adjustment.

F. N. B.

POINTERS IN THE HANDLING OF GONORRHEA.

From its very onset and initial symptoms gonorrhea should be treated and managed much the same as any other acute infection or disease. No other acute disease is so lightly considered by the patient as this. Too often he is disposed to go about his work or affairs as if nothing were wrong instead of abandoning all his activities and seeking repose in bed. Very often the only treatment employed is a ready-made or hand-me-down, and even this may be applied in a haphazard, hit-or-miss style with no good results accruing to the patient.

In the majority of cases coming to us the gonorrheic victims have first used self-medication at the suggestion of a friend or druggist or from some left-over prescription. Not infrequently they have consulted another physician or two previous to coming to us, for the gonorrheic patient is nomadic in seeking medical advice and is notoriously hard to hold. This being true I believe it a good plan in accepting these cases to require an advance fee, for by so doing the patient is more likely to stay with the doctor long enough to give each a fair show and perhaps effect a cure.

Rest, both physical and mental, I have found to be one of the strong factors in expediting a cure. The army method is to place the victim in the hospital where he can obtain absolute rest and where his food and drink are properly restricted. Under this plan cures are consummated in a comparatively shorter space of time. I have had occasion to observe repeatedly that complications are more common in patients who do not cease their activities; complications are also ever multiplying in patients who in will-o'-the-wisp fashion shift from

one physician to another and one line of treatment to something else. It is now a well known fact that in the past gonorrhea has been greatly over-treated.

It is never wise to promise a patient a cure under a month or six weeks, although a cure may be reasonably expected in a couple of weeks, provided the fellow is on good behavior and will follow out your suggestions to the very letter. The diet should be light but nutritious. It should consist mainly of milk, cereals and soft cooked eggs. The bowels should be kept open with salines. Mucilaginous drinks have a measure of value; distilled water is also of value in case there is much vesico-renal irritation. As a rule it is well for the patient to drink pure water copiously.

In order to lessen the danger of chordee, orchitis and kiudred troubles the patient should wear a snug-fitting suspensory; he should also frequently lavage the genitals in a hot boracic acid solution. If any symptoms of chordee supervene the genitals should be bathed in cold water and large doses of monobrated camphor administered.

Of remedies used directly for the purpose of inhibiting the gonococci a suitable silver preparation seems best indicated. Peroxide of hydrogen injections are quite generally used now, so much in fact that it might be classed as a lay remedy. While this agency may kill some of the cocci, yet I think it likely to create harm because by its seething, foaming action the germs not inhibited may be extended to new and uninvaded areas.

Astringent injections ordinarily employed only lessen the flow to some extent and may cause the gonococci to burrow deeper into the submucous tissues, and the beneficent results thought to be derived from the treatment are more apparent than real. As an internal remedy, after the acute stage has passed, pure oil of sandalwood holds the boards.

In recent months I have had gratifying results from the local use of a preparation of colloidal silver with albumoses known as Syrgol. This preparation is soluble in water and is quickly prepared. Two to four parts are dissolved in 1000 of hot water. In this strength it is dependably germicidal, yet does not irritate or inflame the mucous membrane. Syrgol solutions may be safely employed in the acute state, because it can be used in a strength that will kill the gonococci and does not drive virile germs on into new fields as many remedies do. Chronic cases require treatment for a longer time, as the organism has been driven deeper into the submucous tissues.

In posterior urethritis, in addition to all the foregoing, I endeavor to locate the sore

spots through the urethroscope and make a direct application of silver solution. Sandalwood oil is the only internal remedy that can be expected to exert any salutary effects in chronic cases. M.

Editorial News Items.

Westbrook Sanatorium, Richmond, Va.

Doctors Jas. K. Hall, Paul V. Anderson and E. M. Gayle announce to the medical profession that on December first a new building of thirty rooms will be opened. This house will be exclusively for men, and the main building will be reserved for women. Many of the rooms have private baths, others running hot and cold water. All the buildings are heated by steam, lighted by electricity, and supplied by artesian water. The new annex is equipped with complete hydrotherapy and electrical apparatus, and a large gymnasium is an excellent feature. The institution now has a capacity of sixty patients, and treatment is limited to nervous diseases, mild mental affections and to select alcoholic and drug cases.

Dr. J. Cheston King, of Atlanta, Ga., has just let the contract for the erection of a Sanitarium for the treatment of Nervous and light Mental Diseases. The institution will be the finest of its kind in the South. It will be situated in one of the most exclusive suburbs of Atlanta on twenty-three acres of ground. It will be of fire proof construction, three hundred feet long and will cost about one hundred thousand dollars.

Dr. King is the medical director and proprietor of the Howell Park Sanitarium of Atlanta.

Dr. Lyle S. Booker, 406 Duke Building, Durham, N. C., announces to the medical profession that after December 1, 1912, his practice will be limited to surgery.

Seventh District Medical Society.

The third annual meeting of the Seventh District Medical Society was held in the Auditorium of the Graded School at Wadesboro, N. C., on December 3rd.

In the absence of Dr. J. M. Covington, Jr., Chairman of the Committee of Arrangements, Dr. A. J. Crowell, Chancellor of the District, called the meeting to order. Rev. W. B. Doyle made the opening prayer and delivered the Address of Welcome.

The meeting was then turned over to the President, Dr. D. A. Garrison, of Gastonia, N. C., and a busy and profitable day was spent in scientific study.

The Executive Committee elected the fol-

lowing officers for the ensuing year: Dr. J. M. Covington, Jr., Wadesboro, N. C., President; Dr. J. B. Wrighton, Lincolnton, N. C., Vice-President; Dr. R. H. Lafferty, Charlotte, N. C., Secretary; and chose Lincolnton as the next place of meeting. The Society also accepted the invitation of the Doctors of Charlotte to a Clinic Conference to be held in this city about March 1st, the date to be announced later.

One feature of the meeting was the large number of clinical cases that were presented. Dr. Addison Brenizer, of Charlotte, opened the work of the Society by presenting a number of interesting bone and joint cases.

The evening session was given over to the public and two addresses were delivered. Dr. I. W. Faison, of Charlotte, on "Prophylaxis in Children" and Dr. Chas. Strong, of Charlotte, on "The Cancer Problem."

The following papers were read:

"Ileo-Colitis," (read by title) Dr. C. D. Thompson, Lincolnton, N. C.

"Functional Leucorrhoea," Drs. T. H. Wright and Wm. Allen, Charlotte, N. C.

"Closure of Abdominal Incisions," Dr. L. N. Glenn, Gastonia, N. C.

"Report of Cases," Dr. R. L. Gibbon, Charlotte, N. C.

"Report of Results of Treatment of Syphilis with 606," Dr. A. J. Crowell, Charlotte, N. C.

"Complement Fixation Test in Diagnosing Gonorrhoea," Dr. J. W. Squires, Charlotte, N. C.

"Prognosis of Gonorrhoea," Dr. F. D. Austin, Charlotte, N. C.

"The Ancient and Modern Doctor in Connection with the Advance of Medical Science," Dr. R. Armfield, Marshville, N. C.

"Does Alcoholism in the Parents Injure the Children?" Dr. S. M. Crowell, Charlotte, N. C.

"Medical Crooks," Dr. H. D. Stewart, Monroe, N. C.

"Hookworm," Dr. P. W. Covington, Wadesboro, N. C.

"Ptosis: Report of Case, Symptoms, Operative Treatment and Technique," Dr. R. S. Cauthen, Charlotte, N. C.

"Tonsils," Dr. J. B. Wright, Lincolnton, N. C.

"Some Objections to Removal of the Tonsils," Dr. J. P. Matheson, Charlotte, N. C.

"Treatment of Acute and Chronic Otitis Media," (read by title) Dr. J. W. McConnell, Davidson, N. C.

"The Eye in Incipient Tuberculosis," Dr. C. N. Heeler, Charlotte, N. C.

"Report of Five Eye, Ear, Nose and Throat Cases Caused by Syphilis," Dr. R. W. Petrie, Charlotte, N. C.

Book Notices.

The Advance of Women From the Earliest Times to the Present. By Jane Johnstone Christie. Philadelphia and London: J. B. Lippincott Company. 1912.

The author argues that by the failure of giving woman equal rights with men the moral and mental development of the world has been greatly retarded, and that by her sharing the rule with mankind war would soon be a lost art. All Mrs. Christie's statements are supported by a convincing array of biological, ethnological and sociological facts that would impress the most veritable skeptic of the quality of woman.

The book will be of especial interest to those interested in woman suffrage. The publishers have done their part with this book in a creditable manner. It is both neat and attractive.

The Chronicles of Quincy Adams Sawyer, Detective. By Charles Felton Pidgin, and J. M. Taylor. Illustrated by Harold James Cue. Boston: L. C. Page & Co. 1912.

This is one of the best and most interesting detective stories that has been published. It is thrilling from start to finish. Each chapter is a complete story. The subjects of which are as follows: I. The Affair of the Double Thumb Print; II, The Affair of the Golden Belt; III, The Affair of Mireachable Island; IV, The Affair of Trimountain Bank; V, The Affair of Lamson's Cook; VI, The Affair of the Plymouth Recluse; VII, The Affair of William Baird, P. B.

This volume is neatly bound, and shows that the publishers have spared no effort on their part.

Principles of Human Nutrition; A Study in Practical Dietetics. By Whitman H. Jordan, Director of the New York Agricultural Experiment Station; Author of "The Feeding of Animals." New York: The MacMillan Company. 1912.

An examination of this volume will at once make it evident that it was not prepared for use with students who have specialized in organic and biological chemistry. The object in view was rather such a presentation of the subject matter related to human nutrition as would be more or less adapted to popular use, but particularly to instruction of students with moderate scientific acquirements, whether in colleges, secondary schools, short courses, or domestic science schools.

This volume is of value not only to professional men, but also to the general public.

The book is well bound, and shows no lack of work on the part of the publishers.

The Island of Beautiful Things; A Romance of the South, by Will Allen Drumgoole. Boston: L. C. Page & Co.

The scenes of this story are laid in the South, but the man has traveled far and near in an effort to forget an early love affair. It has made him a bitter cynic, but upon his return home a little child comes into his life. To him the man pours out his hurt and disappointment in a remarkable manner, but the little child is a wonderful confidant; he tells just so much, and at just the right time, and through him "his man" meets "his lady" who rekindles the flame of love. She has great sincerity and earnestness.

The volume is beautifully bound, and the story is one that will be both entertaining and helpful. The authors' well chosen adjectives, and art of description makes the book accord with its title.

The Cradle of the Deep; An Account of the Adventures of Elanor Canning and John Starbuck. By Jacob Fisher. Boston: L. C. Page & Co. 1912.

The author of this volume has a peculiar knack of using forcible and picturesque description which causes a readers' blood to almost run cold, and holds his interest to the highest tension. The book contains chapters on the following subjects: I. The Wreck; II, On the Breast of the Waters; III, The Second Officer Takes Charge; IV, In the Watches of the Night; V, The Battle with the Waves; VI, Monsieur Aubert Explains; VII, Two Men and a Woman; VIII, Starbuck Island; IX, With Death in the Cup; X, The Clean Air of Morning; XI, What Manner of Man; XII, The Raising of The Dingy; XIII, In the Bonds of Service; XIV, The Husk of Convention; XV, The Giving and the Taking; XVI, Treasure; XVII, Shanghaied; XVIII, Alone; XIX, The Escape; XX, By Dead Reckoning; XXI, By the Words of Men.

The publishers are to be congratulated upon their most excellent work on this volume.

Truths; Talks with a Boy Concerning Himself. By E. B. Lowry, M.D. Chicago: Forbes & Company. 1912. Price, 50c.

Just how to present certain phases of life, concerning reproduction, sexual hygiene, etc., depends upon his age, environments and circumstances.

When we consider that over forty per cent. of the childless homes in the world are due to one of those loathsome diseases called the "black plagues," that seventy per cent. of the blindness in the world can

be traced to the same cause, and that over forty per cent. of the operations on the female organs are directly traceable to one of these diseases contracted from the husband, then we realize the need of war on these grim destroyers.

With the desire to help fathers and mothers in their work of protecting their sons, this little book has been written.

It is neatly bound and contains only 25 pages of reading matter. The truths set forth in this little volume are so plain and simple until even a very small boy may understand every word in it.

The Dramatic Festival; A Consideration of the Lyrical Method as a Factor in Preparatory Education. By Anne A. T. Craig, with a Foreword by Percival Chubb, Leader, Ethical Society, St. Louis, and an Introduction by Peter W. Dykema, Director of Music and Festivals at the Ethical Culture School in New York City. G. P. Putnam's Sons, New York. 1912.

In presenting this book the author is aware that it includes much material familiar to pioneers in the field of aesthetic culture it deals with, and also to those who have gained experience in the field since it has been more widely incorporated in school work. The book has been prepared with the young teacher in mind, and the normal school student.

In the school for children, not for training teachers, there are properly separated departments in which the different arts belong. But to focus the results of training in these arts in the way the festival and dramatic arts so valuably afford, a special department in the teacher's training school is needed to show the way, and has not thus far been provided.

The volume is substantially bound, and will be found of value in our modern schools.

The Jack Lorimer Series. Jack Lorimer, Freshman, or From Millvale High to Exmouth. By Winn Standish. Illustrated by Harold J. Cue. Boston: L. C. Page & Co. 1912.

This is the fifth book that Harold J. Cue has written concerning "Jack Lorimer." In this one we see Jack grown older, swept into strange surroundings, exposed to new temptations. There are times in his Freshman year when he is in danger of drifting and when in the reaction he almost loses courage. The fact that he rises above his errors is the best proof of the soundness of his nature and the surest encouragement of other boys.

The story is extremely interesting and it has a good moral back of it. We take

pleasure in recommending this book to our readers.

False Modesty that Protects Vice by Ignorance. By E. B. Lowry, M.D. Chicago: Forbes & Company. 1912. Price, 50c.

This is one of the most convincing and thorough appeals ever made for the proper education of the young in matters pertaining to sexual hygiene. The book will be of vital, helpful interest to every parent, teacher, physician and minister.

The chapters of this book were written and published in a prominent magazine as a sequel to the series that first brought the white slave traffic to the attention of the world in general.

To bring these facts to the attention of parents, to show them the necessity of early and proper instruction for both boys and girls in matters pertaining to sex, and to prove that the parents who withhold this knowledge are committing a crime in allowing their children to fall because of ignorance is the aim of the author.

There are one hundred and ten pages of reading matter in this little volume. It is well bound, and we hope it will meet with the interest it deserves.

Herself. Talks with Men Concerning Themselves. By E. B. Lowry, M.D., Author of "Confidences" "Truths," etc. Forbes & Company, 1912. Price, \$1.00.

This book contains truths vitally important to every woman. The health and happiness of mothers and children depend upon their knowledge of the facts here given with great clearness and conciseness, by a physician of national reputation in the scientific care of women. It is a book the world has long needed.

It is neatly bound and the publishers have added a great deal to its attractiveness.

Himself. Talks with Men Concerning Themselves. By E. B. Lowry, M.D., Author of "Herself," "Truths," etc., and Richard J. Lambert, M.D. Chicago: Forbes & Company. 1912. Price, \$1.00.

The demand for a book that would state in non-technical terms the things concerning the body that should be known by every adult male, without any attempt to dictate, has led to the publication of this book.

The author has desecrated in a simple, but correct manner, the general anatomy of the male generative organs with their most common diseases.

It is to aid intelligent men who wish to inform themselves correctly on matters of importance to themselves and their offspring that this book has been written.

With its substantial and attractive binding, coupled with its immense amount of information, this little book will be found

of great value in every home or in every library.

The Master of Mysteries. Being an Account of the Problems solved by Astro-seer of sects, and his love affair with Valeska Wynne, his assistant. With illustrations by Karl Anderson and George Brehm. Indianapolis: The Bobbs-Merrill Company, Publishers.

This is one of the most thrilling stories published recently. It is a complicated love story and one that would interest almost any reader. It is extensively illustrated, which adds much to the interest of the story.

Old-Time Makers of Medicine; The Story of the Students and Teachers of the Sciences Related to Medicine During the Middle Ages. By James J. Walsh, K.C. St. G., M.D., Ph.D., LL.D., Litt. D., Sc.D., Dean and Professor of Nervous Diseases and of the History of Medicine at Fordham University School of Medicine; Professor of Physiological Psychology at the Cathedral College, N. Y. New York: Fordham University Press. 1911. Price, -2.00.

Besides his many arduous duties as a busy specialist, as dean of a university, whose flourishing condition is largely due to his indefatigability, and as an active teacher, Professor Walsh has found time, in his leisure hours, to become an authority on the history of medicine and the biographies of its leading members. While he does not lay claim to original research work, and in his strenuous career he would never have time to undertake such, he is usually careful in the selection of his authorities. In the present volume he has paid special attention to Hebrew and Arabian physicians and the early period of western restoration of medical science. Thus we find articles on great Jewish physicians, on Maimonides, on great Arabian physicians, on the medical school at Salerno, and on Constantine Africanus.

The volume is worthy a place in every medical library, and we take pleasure in recommending it to our readers.

Enzymes. By Otto Conheim, A. O. Professor of Physiology, Heidelberg. First Edition. New York: John Wiley & Sons. London: Chapman & Hall, Ltd. 1912.

This little volume contains twenty-two lectures given under the Herter Foundation at the University and Bellevue Hospital Medical College in the City of New York in 1910. They were delivered before an audience of physicians and students, and the subject was treated from the biological point of view. These lectures are very in-

teresting and very valuable. The volume embraces 173 pages of carefully indexed reading matter.

Pharmacology and Therapeutics. For Students and Practitioners of Medicine. By Horatio C. Wood, Jr., M.D., Professor of Pharmacology and Therapeutics in the Medico-Chirurgical College; Physician to the Medico-Chirurgical Hospital; Second Vice-Chairman to the Committee of Revision of the U. S. Pharmacopoeia. Philadelphia and London: J. B. Lippincott Company. Price \$4.00.

This work contains chapters entitled as follows: Drugs Used to Affect Secretion; Drugs Used to Affect Nervous System; Drugs Used to Affect Circulation; Drugs Used to Affect the Alimentary Tract; Drugs Affecting Metabolic Processes; Drugs Acting on Causes of Disease; Extraneous Remedies; Emollients; Drugs of Minor Importance.

This work is up to date in every sense of the word, and will be of great value to the medical profession. It contains 429 pages of carefully indexed reading matter.

The Care of the Insane and Hospital Management. By Charles Whitney Page, M.D. Boston: W. M. Leonard, Publisher. 1912.

Insanity is the most grievous malady ever inflicted upon mankind. This little volume gives in a most concise manner the methods for taking care of these demented persons. Larger volumes may have been written on this subject, but we feel that this work of Dr. Page's is quite complete.

The volume is nicely bound, and contains 155 pages of reading matter.

Manual of Medicine. By A. S. Woodwark, M.D., M.R.C.P. Edinburgh, Glasgow, and London: Henry Frowde and Hodder & Stoughton.

This work is divided into eleven sections as follows. Diseases of the Alimentary System; Diseases of the Kidneys; Diseases of the Respiratory Organs; Diseases of the Circulatory System; Diseases of the Blood and Lymphatic System; Diseases of the Ductless Glands; Constitutional Diseases; Diseases of the Nervous System; General and Functional Diseases of the Nervous System; Insanity; Acute Specific Fevers.

The volume seems to be quite up-to-date in every way. It contains 409 pages of reading matter, and is carefully indexed.

The Soul and Sex in Education, Morals, Religion, and Adolescence, Scientific Psychology for Parents and Teachers. With a Chapter on Love, Marriage, Celibacy, and Divorce. By Jirah D. Buck,

M.D. Cincinnati: Stewart & Kidd Co. 1912.

This book contains four chapters entitled as follows: An Aerial Excursion "Beyond the Clouds;" The Nature of Inspiration and Revelation; The Interpretations of Scientific Psychology; Adolescence in Relation to Religious Education; Love, Marriage, Celibacy, and Divorce, or, The Problem of Sex.

This book is a little out of the ordinary, and contains some very valuable reading matter, and is worth reading.

The book contains 175 pages, and is well bound.

A Brief Text of Physiology for Dental, Pre-Medical and College Students. By Carl J. Wiggers, M.D., Department of Physiology, University of Michigan. 47 Illustrations. George Wahr, Publisher, Ann Arbor, Mich.

It is not the purpose of this little volume to replace the larger text-books of physiology among medical students, but rather to antedate them.

The table summaries following each chapter will prove useful to medical and dental students, who, after a lapse of time, desire to review the subject preparatory to State Board or Hospital examinations. The subject matter, with the exception of the chapter on the central nervous system, which can be abridged, may also be adapted to scientific courses in colleges, normal schools, training courses for nurses, etc., where chemistry and physics have formed a part of the course or are supplemented by the instructor.

The book has a cloth binding, and is a convenient size.

The Care and Training of Children. By Le Grand Kerr, M.D. Funk & Wagnalls Company, New York and London. 1910.

This book has been written with the object of meeting the direct needs of mothers in the raising of their children.

It is practically true of child training and care that rapid advancement has been made at the cost of known values. This little volume contains twenty-one chapters as follows: I, The Child's Room; II, Clothing; III, Diet; IV, Bathing; V, Sleep, VI, The Bowels; VII, The Teeth; VIII, Weight and Height; IX, Education at Home and in the Kindergarten; X, Education at School; XI, Relations of the Parent to the Child; XII, Government of the Child; XIII, Punishment; XIV, Gentle Methods in Government; XV, The Moral Failings of Nervous Children; XVI, The Child's Literature; XVII, The Child's Friends; XVIII, The Child's Amusements; XIX, The Child's

Possessions; XX, The Question of Sex; XXI, Evil Habits.

With all these subjects thoroughly discussed, this little volume is one of real value.

The Practitioner's Visiting List for 1913.

An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-Patient Perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil with rubber, and calendar for two years. Price by mail, postpaid, to any address, \$1.25. Thumb letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, Publishers, Philadelphia and New York.

Being in its twenty-ninth year of issue, The Practitioners' Visiting List embodies the results of long experience and study devoted to its development and perfection.

It is issued in four styles to meet the requirements of every practitioner: "Weekly," dated for patients 30; "Monthly," undated for 120 patients per month; "Perpetual," undated, for 30 patients weekly per year, and "60 Patients," undated, for 60 patients weekly per year.

The text portion of The Practitioners' Visiting List for 1913 has been thoroughly revised and brought up-to-date. It contains, among other valuable information, a scheme of dentition; tables of weights and measures and comparative scales; instructions for examining the urine, diagnostic table of eruptive fevers; incompatibles, poisons and antidotes; directions for effecting artificial respiration; extensive table of doses; an alphabetical table of diseases and their remedies, and directions for ligation of arteries. The record portion contains ruled blanks of various kinds, adapted for noting all details of practice and professional business.

Printed on fine, tough paper suitable for either pen or pencil, and bound with the utmost strength in handsome grained leather, The Practitioners' Visiting List is sold at the lowest price compatible with perfection in every detail.

The Next President.

When an election is once over, and the results are ascertained, the American people have a happy fashion of laying aside all feeling of acrimony, and of reconciling

themselves cheerfully to the will of the majority. During the campaign, Governor Wilson's political opponents naturally did their best to find debating ground against his views as expressed from time to time. But he kept an admirable poise and temper, talked generalities in a charming, yet statesmanlike manner, and found himself on good terms with everybody at the end of the campaign. Men who have shown themselves fitted to serve in the presidency of an American university must possess executive talent of a high order and experience of a very wide range. The business of being a university president requires great power of decision and develops marked personality. If Governor Wilson could also have served in Congress for a term, he would perhaps have been by just so much the better fitted for headship of the national government. But it is the general belief that we are fortunate in having a man of his great attainments and high character to be our next President, and his well-wishers are millions strong.—From "The Progress of the World," in the American Review of Reviews for December.

The New Volume of the Century.

The Century Magazine, whose new year began with the November number, now on sale, will during the coming year contain many features of interest to women. The discussion of "The Fraternity Idea among College Women," an investigation undertaken for The Century by Edith Rickert, whose first article appears in the November number, will be continued. Other November articles that any progressive would regret missing are "Violence and Woman's Suffrage," by Millicent Fawcett, President of the National (British) Union of Women's Suffrage Societies, and Ethel Dean Rockwell's "The Feminist of France." Features planned for forthcoming numbers include three on "The Unmarried Woman"—in America, in France and in England. Articles describing woman's progress generally will be features throughout the coming year.

the uterus, the total vaginal extirpation may be regarded as the best procedure. The number of patients cured by this means is relatively large. An invasion of the parametrium usually occurs late and if the extension has once taken place, the carcinomatous process has extended so far that even an extirpation of the parametrium cannot result in a cure. Moreover, the patients are usually older women in whom extensive operative procedures, especially by the abdominal route, are very dangerous and for this reason the simpler vaginal hysterectomy is usually preferable. In cases where the carcinoma is derived from the cervical mucous membrane, it is usually necessary to remove the entire uterus with the parametria, especially if the growth starts from the upper portions of the cervix. Where the carcinoma begins in the lower segments of the cervical mucous membrane, and in which it has not extended upward, or where the parametrium remain free, the case does not, as a general thing, come under observation and treatment, because in this stage the new growth is productive of very few symptoms. Here, a partial excision, including the cervix, is as much justified as a radical operation, but if in a case of this kind, the parametria has become involved, a radical operation possibly offers a better prognosis. In a carcinoma of the vaginal portion of the cervix without evident infiltration of the parametrium, no definite conclusions as to the treatment can be arrived at. He says that the best results attend a partial extirpation and that the good effects obtained by the older procedures with the thermocautery should not be discarded. It may be possible that the heat rays proceeding from the cautery exert a similar effect as that of the Roentgen and radium rays and that absorption of some of the neighboring carcinoma cells may occur. Theilhaber is therefore in favor of extending renewed attention to the palliative operations by means of the thermocautery.

Septic Thrombosis of the Sigmoid, Cavernous, and Petrosal Sinuses.—Balance, in The London Lancet, reports a case of this condition occurring on the left side in a boy aged 12 years. In spite of prompt surgical intervention death occurred. Thrombosis of the cavernous sinus may occur from frontal sinus or sphenoidal sinus infection, from cellulitis of the face, carbuncle of the neck, meningitis, sarcoma of the base of the skull, marasmus, and traumatism, as well as from extension of septic processes from the sigmoid sinus or petrous bone. The following symptoms may appear: (1) Those due to venous obstruction, (a) Proptosis; (b) edema of eyelids

Abstracts of the Leading articles of the month.

Carcinoma of the Female Genitals.—

Theilhaber (Arch. f. Gyn.) says that the statistics as to final results thus far presented by different schools of operators, do not permit us to draw conclusions which are of absolute significance. Experience seems to show that in carcinoma of the body of

and chemosis of the conjunctiva when the thrombosis extends into the ophthalmic vein; (c) edema of the face when the facial vein is thrombosed; (d) enlargement of the frontal veins, due to diversion of the circulation through the orbito-facial anastomosis; (e) venous hyperemia of the retina and choked disc are not symptoms of thrombosis of the sinus; such congestion depends upon the obstruction involving the ophthalmic and retinal veins. (2) Symptoms due to interference with nerves. (a) Supraorbital neuralgia, due to irritation of the first division of the fifth nerve. This division of the fifth nerve is generally the first to suffer. (b) More or less paralysis of the muscles of the eye, which may amount to complete ophthalmoplegia, due to affection of the third, fourth, and sixth nerves. The completeness of the ophthalmoplegia indicates a change in the wall of the sinus as well as in its contents—i.e., phlebitis as well as thrombosis.

Treatment of Laryngeal Tuberculosis.

—Hett (British Journal of Tuberculosis) says that while very slight laryngeal lesions in an advanced and rapidly progressive case of pulmonary tuberculosis are of grave prognostic import, being frequently subterminal infections, in other cases, where there are extensive lesions of the larynx in patients with normal temperature and a chronic type of pulmonary lesion, radical surgical procedures can often be done with impunity, and achieve excellent results. Lesions of the vocal cords can frequently be arrested by absolute vocal rest for six months, if the chest condition is favorable. Enlarged arytenoids can often be reduced by deep puncture with the galvano-cautery, and where this fails, Hett has had good results by punching them out; he has never met with failure of the wound to heal. Infiltrations without ulceration of the ventricular bands are best treated by successive deep cautery punctures at intervals of ten days. Superficial ulcerations of the vocal cords should be merely touched with the cautery. Curetting should be limited to large ulcers and be employed with caution in order to avoid producing a larger breach of surface than already exists.

Where tuberculous lesions are confined to the epiglottis, the author has been much impressed by the results of removal of the body with punch forceps; the stump never failed to heal when this measure was employed in suitable cases. Even in desperate cases the extreme dysphagia, due to the infiltrated and sloughing epiglottis, was at once relieved.

Accumulation of secretion in the larynx can be prevented by the use of an alkaline

laryngeal spray. Unnecessary coughing should likewise be prevented, and where it is caused by irritation in the larynx, dry inhalations of creosote, phenol, and chloroform, through a Yeo mask, worn for some hours at a time, are very efficacious.

Radium Therapy of Fibromata.—Cheron (Jour. de med. de Paris) says that he applies radium in the cavity of the uterus to arrest hemorrhage in cases of fibroma uteri, and with fibroids of moderate size he gets excellent results. The Dr. says that there is a profound effect on the vascularization of the muscle of the growth, which causes hemostasis by obliteration of the vessels, but without causing gangrene of the mucosa which is often normal. He combines his internal application with external use of the ultra-penetrating rays through the abdominal walls. The writer uses 5 centigrams of radium, for several hours. The application may be made in the vagina when it is difficult to introduce the tube into the uterine cavity. The action of the radium should be on the whole uterus and there should not be a marked effect on the mucosa. The tube should be wrapped with several folds of gauze to remove the effect of the superficial rays, and to allow the action of the ultra-penetrating rays only. If the menopause is near, an artificial menopause may be brought on. Sitings should last from six to twelve hours, sometimes as long as twenty-four hours. The hemorrhages are arrested permanently.

Pathology of Ovarian Tuberculosis.—

Cohn (Arch. f. Gyn.) gives the results of his investigation in a series of fourteen ovaries removed for tubercular infection, as the result of which he finds in agreement with others that it is impossible to distinguish between a milinary and a cheesy form of ovarian tuberculosis, as both varieties may be present in the same ovary and merge one into the other. These cases were all operated upon for the clinically more evident tubal or peritoneal tuberculosis. Cohn claims that the superficial layers of the ovary present a resistance to the extension of a tuberculous perioophoritis into the interior of the organ, which is determined to a slight degree by the behavior of the germinal epithelium, but principally by the resistance of the thickened tunica albuginea. In this way the tuberculous infection of the ovary from the surface is either entirely prevented or at least markedly inhibited. Small openings on the surface of the ovary, such as the sites of ruptured Graafian follicles, offer an opportunity for the invasion of a tubercular process from the peritoneum and it is probable that the not uncommon tuberculosis of the corpus

luteum arises more frequently in this manner than in a hematogenous manner. Large unruptured follicles are not apparently affected. A tuberculous infection may also extend into the ovary from the lymph vessels by way of the hilus from a tuberculous tube. A hematogenous infection of the ovary is probably less common than has usually been assumed. An example of this mode of infection, however, was afforded by the finding of an isolated focus in a dermoid cyst. In operating on cases of adnexal tuberculosis, the ovaries may be preserved even if tuberculous nodules are present on the surface. These must be removed, however, if a tuberculous infection of the corpora lutea is present or an extension has occurred through the hilus.

Syphilis in Pregnant Women.—Poucot (Rev. mens. de gyn. d'obst. et de ped.) gives the history of a case which demonstrates the possibility of the wife of a syphilitic man producing a syphilitic child, without being herself infected. The importance of this case lies in the fact that the woman was later plainly infected with syphilis by a second husband; hence the first macerated fetus, the result of marriage with a syphilitic, was not an evidence of syphilis in the mother. She evidently escaped the first infection, to be infected by a second syphilitic man.

Treatment of Tuberculosis Complicated by Pregnancy.—Brindeau (Jour. de med. de Paris) says that pregnancy aggravates tuberculosis and that its effect is more serious the more advanced the tuberculosis at the time that pregnancy begins. If the tuberculosis is latent, pregnancy will bring about its development. It is necessary for the mother to give to her child for its development a large amount of calcium, and according to the modern theory tuberculosis is a disease that is characterized by a paucity of calcium. Many of the infants born of tuberculous mothers are weak and will soon succumb to malnutrition. The author has found that an early abortion generally benefits the mother, and he thinks that we should disregard the life of the child and produce an abortion before the third month when we believe that the mother's disease will be increased by a continuance of pregnancy. If the pregnancy is more advanced we should allow it to go on and improve the nutrition of the mother as far as possible.

Inconveniences in Later Labors of too Complete Restoration of the Perineum.—Bonnet-Labordiere (Jour. de sci. med. de Lille) says that serious complications may ensue in later labors if we repair too care-

fully the perineum, and sew together too high up the fibers of the levator ani muscles. We may thus cause a stenosis of the vagina, and the tissues in this case are not relaxed by the softening of pregnancy. We should be careful not to freshen too much tissue in these operations, or to create a large amount of cicatricial tissue in the pelvi perineal region. In this type of stenosis either the parts relax, or tear, or there comes about the necessity of operative interference to deliver the child. Here it may be necessary to cut the tissues in the middle line sufficiently to allow of the escape of the head and shoulders. In a case of this kind observed by the author operation was necessary and was followed by severe hemorrhage due to uterine atony, following a very severe labor. In some cases Caesarean section becomes necessary and the uterus may even have to be removed at the same time.

Diphtheria of the Esophagus.—Rolleston (British Journal of Children's Diseases) reports the case of a boy, aged two years and four months, who was admitted to hospital on the eleventh day of disease and died in seven hours. At the postmortem, among other findings, the middle third of the esophagus presented some infection of the mucosa, and in the lower third "were two longitudinal areas of necrosis, 3.5 cm. each in length, coalescing below, where each measured 2.2 cm. in width, and stopping just short of the lower end of the esophagus. No diphtheritic membrane was left, but direct smears and cultures showed numerous diphtheria bacilli." It is rare to find the esophagus involved. Rolleston finds 22 cases have been recorded since the discovery of the bacillus. Postdiphtheritic stricture of the esophagus has been recorded, and it is conceivable, he thinks, that if his case had recovered there would have been a stricture of the esophagus.

Erythema Nodosum and Tuberculous Meningitis.—Sezary (Medical Press and Circular) says that the close relationship between erythema nodosum and tuberculosis is now well known. This was first pointed out clinically, and attempts to prove it anathopathologically have not been very successful. The clinical evidence, however, is convincing. In considering the future of a child that has had erythema nodosum, the increased liability to tuberculous meningitis must be borne in mind. Many cases of tuberculous meningitis give a history of attacks of erythema nodosum. Some authors not only think that the two diseases are associated, but claim that the erythema nodosum is in reality an early symptom of the more grave disease. As the attack of erythema nodosum may antedate the men-

ingitis by many months, its appearance may indicate prophylactic treatment which will prevent the development of the meningial infection. There are two hypotheses as to the nature of the relation of the two diseases. The skin eruption may be of direct toxic or bacillary origin due to the tubercle bacillus. On the other hand, the cutaneous lesion may be a peripheral manifestation of the affection of the central nervous system, similar to the angioneurotic edema or purpura. It is thought by some to be the only visible symptom of an imperfect meningial syndrome. However, this may be with regard to the question of pathogenesis, it is our duty to bear in mind the fact that tuberculous meningitis is a common sequel of erythema nodosum, so that our prognosis should be extremely guarded.

Phlebotasis.—Lilienstein (Med. Klinik) says that the method of bloodless phlebotomy has given excellent results in his hands, in cases of broken compensation. The arm-band of a sphygmomanometer is placed about either an arm or a leg, close to its articulation with the body and inflated until the pulse disappears. This pressure is maintained for two or three minutes; the blood is then again allowed to flow through the limb for a few moments and this process is repeated three or four times. The result is an intense and prolonged passive congestion of the limb which acts upon the general circulation just like an extensive withdrawal of blood by means of venesection, without, however, depriving the body permanently of any of its blood. The dyspnea and oppression disappear, the accentuated second pulmonic sound becomes more nearly normal and the dilated right heart recedes. The best results are obtained in cardiac dyspnea, but the procedure is useful in impending apoplexy, in meningitis, in uremia; in short, whenever venesection might be indicated. The contraindications are: (1) A tendency to thrombosis; (2) edema or varicose veins of the extremity. The method should be used only by the physician himself and under his constant supervision.

The Radical Cure of Hernia in Infants and Young Children.—Kellock (Proceedings of Royal Society of Medicine) says that considerable importance should be given the origin of inguinal hernia in young children, so far as the sac, at any rate, is concerned, and thinks that the only "acquired" factor is the protrusion of some viscus into an already existing sac. The writer holds that operation can and should be done at an early age, and believes that a suitable procedure is one he has reduced

to a very simple form. Some importance is attached to preparatory treatment. An infant who has a hernia of any size is kept for a few days before the operation in the Trendelenburg position, with the feet and legs over a wedge pillow, so that the hernia is kept out of the way. In the operation itself, an inch incision is made through the skin at right angles to the direction of the cord, and just above the external abdominal ring. This incision is well away from the genitals, and is accompanied by very little bleeding. The coverings of the cord being divided longitudinally, the sac is found, isolated, drawn down, transfixed and ligatured as high up as it can be reached, and the skin wound then closed.

Habitual Dislocations of the Shoulder-Joint.—Telford, in The London Medical Lancet, says that he employs the following technic in operating upon these cases: With the arm abducted to a right angle, a curved incision some seven to eight inches in length is made in the line of the anterior fold of the axilla. The incision follows the lower border of the greater pectoral, and is continued for some distance down the arm along the inner border of the coraco-brachialis muscle. The lower edge of the pectoral is defined and retracted upwards and inwards. The interval between the packet of axillary vessels and nerves and the coraco-brachialis is at once apparent. The vessels and nerves are gently retracted inwards, and the coraco-brachialis is drawn outwards. In this manoeuvre the anterior circumflex artery will probably need division, and the separation, in a downward direction, of the fibers of the coraco-brachialis muscle will obviate harmful traction on the musculocutaneous nerve. If the arm be rotated outwards and the head of the humerus thrust forwards, the subscapularis tendon is seen in the floor of the interspace between the neuro-vascular packet and the coraco-brachialis. If the subscapularis be now in part divided and in part retracted, the underlying capsule is exposed. A large oval piece, measuring $1\frac{1}{4}$ inches by one-half inch, is easily removed, and through the opening thus formed the interior of the joint is readily inspected and explored for any loose body or other abnormality. The long axis of the ellipse lies across the capsule at right angles to its fibres. The opening is closed by sutures of formalin catgut, and the incision in the subscapularis tendon is repaired by a second layer of sutures. The insertion of sutures is much facilitated by inward rotation of the arm. The wound is then closed without drain. The operation by this route is almost bloodless, and in the second of Tel-

ford's cases it was not necessary to leave any ligature in the wound. The after-treatment consists in fixing the arm to the side for eight days, after which the sutures are removed, and both active and passive movements are begun in all directions excepting abduction. At the end of the third week movements of abduction are made, and within six weeks free movements of the shoulder should be possible in all directions.

Surgery in Diabetics.—Umber, in *The Deut. med. Wochenschr.*, says that the indications for surgical intervention in diabetics do not differ essentially from those in persons not affected by this disease. This statement applies particularly to surgical procedures in cases of mild diabetes, in which, if feasible, the operation can be delayed until the urine is free from sugar. If, however, this is not advisable, as in appendicitis or severe injuries, intervention can be resorted to at once. As a rule, the gangrene of diabetics is not due to the disease, but to the co-existent arteriosclerotic process. When arteriosclerosis is present, the diabetic disturbances of metabolism, even if the glycosuria is of moderate degree, are apt to increase, but recede after the removal of the gangrenous area. As a rule, an arteriosclerotic gangrenous process cannot be arrested by internal treatment. If gangrene is associated with phlegmonous or general infection, it is best not to wait too long for the line of demarcation. Incision should be avoided in furunculosis associated with mild diabetes, better results being obtainable by reducing the amount of sugar in the urine, by moist applications; or later, by Bier's hyperemia. Comparatively slight trauma may cause great damage in severe diabetes. If in cases of this kind with acidosis surgical intervention cannot be delayed until the metabolism has been improved, it is advisable to administer alkalis by mouth and rectum and to give opium. If possible general narcosis should be replaced by local anesthesia, but if the latter is not adequate, ether-oxygen anesthesia, if necessary with the addition of a little chloroform, is indicated. It is always advantageous to determine exactly the character of the diabetes in the individual case and to ascertain whether any existing acidosis is peculiar to the condition or has been exaggerated by the surgical complication.

The Local Treatment of Edema.—Path-ault (*Jour. de Med. et de Chir.*) says that great edema of the legs often resists obstinately all treatment, especially when the patient declines to permit the limbs to be incised. He has obtained good results from the local use of hypertonic saline solutions.

A strongly hypertonic solution is used, containing 25 to 50 gr. sodium chloride to the litre of distilled water. Gauze compresses are lightly soaked in this fluid and are wrapped round the legs. A thick layer of absorbent cotton is placed over the compresses and the whole held in place by bandages. If the dressing be left on all night, the cotton will be found next morning soaked with fluid, and often the sheets and mattress, too, will be wet. The reduction or the edema is correspondingly marked.

He thinks the process is one of osmosis, the hypertonic saline solution attracting the water directly through the skin. He says that there are certain difficulties in the way of this hypothesis, but maintains that the facts are beyond dispute. Constitutional treatment must of course not be neglected, or the anasarca will promptly reform. Equally good results were obtained in all edemas whether due to broken compensation, Bright's disease, sclerosis or nearly cured phlebitis.

The Question of Fever and Other Pathological Phenomena in the Use of Salvarsan.—Wachenfeld (*Dermat. Wochenschr.*) says that the intra-muscular injection of salvarsan may cause fever. Thus it is stated that Wechselsemann's attitude concerning distilled water does not enter into the discussion. The concentration of the salt solution deserves consideration. Disintegration of the salvarsan seems to have no significance. The author's experience consists of 3500 injections in 1600 patients. In order to investigate the matter still further salvarsan solution as well as normal salt solution was injected into luetic and non-luetic patients. In the latter the injections were of course given in the various stages of the disease. No light was thrown upon the question. Nor did the temperature of the solution seem to influence the reaction. It was suggested that particles of rubber or sulphur from the tubing were the noxious substances. Chemically pure salt, as manufactured by the various big chemical houses of Germany, was thoroughly tested. Here, too, the results were indefinite. In brief, it seems that none of the explanations for the untoward action of salvarsan holds in all cases. It cannot be predicted how either the luetic or non-luetic will respond to the drug, even under maximum favorable conditions as regards and technique.

Treatment of Inguinal Hernia in the Nursling.—Sawariadu (*Jour. de med. de Paris*) says that the method of choice in the treatment of congenital inguinal hernia is immediate operation. Although the small-

ness of the parts renders the operation somewhat difficult still it may be done easily by the method of Lorthioir. This is a very simple operation. It consists of a simple straight incision two centimeters in length, separation of the subcutaneous tissues, luxation of the testicle, which draws the hernia and the cord aside, incision with a bistoury of the envelopes of the cord, isolation and resection of the sac without previous ligation, and suture of the skin, or closing the wound with a pin. He prefers the suture. Healing occurs almost immediately by first intention. A perfect result is obtained with a very small percentage of cases of recurring hernia. Of course a cure may be obtained in many cases by the use of a truss worn day and night; but it is very difficult to keep it in place perfectly in so small a subject, and the location prevents perfect cleanliness. It is uncomfortable for the child. As soon as the operation is completed the attacks of indigestion and pain cease and the digestion becomes perfect. Mortality is nil, and the author has operated on a very large number of patients by this method with success. The operation lasts about ten minutes, sometimes less.

Treatment of Aural Complications of Influenza.—Mole (Bristol Medico-Chirurgical Journal) states that in non-suppurative influenzal otitis media, relief is obtained by antiseptic sprays or irrigations to the nasopharynx, instillations of a few drops of warm carbolyzed glycerin in the meatus, and hot dry applications over the ear. A brisk aperient should also be given. Upon subsidence of the inflammation inflation of the middle ear should be practiced.

In suppurative influenzal otitis media, a condition sudden in onset, with intense pain and deafness, a free incision of the tympanic membrane from top to bottom behind the handle of the malleus should be made when bulging appears. After incision the ear should be cleansed, dried, and packed down to the perforation with a strip of moist antiseptic gauze, as often as is necessary. Small spontaneous perforations must be enlarged by incision. Irrigations of warm boric acid lotion are advisable where the patient's friends have to carry out the treatment. Where healing is sluggish, instillations of boric acid, or of phenol in glycerin (1 to 10) are employed after the ear has been cleansed and dried. After firm healing has taken place, a course of instillations through the Eustachian tube is desirable. Where evidences of healing fail to appear after three weeks of drainage, the mastoid antrum must be opened and drained and the tympanic cavity washed out by this route.

In deafness due to influenzal auditory neuritis or changes in the labyrinth, strychnine should be given.

Hormonal.—Zuelzer (Deutsch. med. Wochenschr.) says that the intravenous use of hormonal, as a peristaltic stimulant, has of late fallen somewhat into disrepute on account of the observation that alarming symptoms of collapse have followed its administration. Zuelzer, the originator of the treatment, who hitherto has strenuously denied the occurrence of the complication, now states that he too has recently observed it. The fact that the first reports of the treatment, involving some 4000 injections, did not mention this accident whereas recently it has been repeatedly reported, led him to infer that there must have been of late some change in the constitution of the drug as marketed. An investigation showed this to be a fact, and the toxic constituent was identified as an albumose. Zuelzer states that at present only albumose-free hormonal is marketed, and that all the older preparations, i.e., those bearing a numeral less than 51, should be rejected. This new preparation is exceedingly active and entirely non-toxic.

The almost magical properties of hormonal, one or two injections of which often relieve obstinate and habitual constipation, when not obstructive in nature, may now, he states, be utilized by the practitioner without fear of danger.

Treatment of Pneumonia by a Poly-valent Stock Pneumococcic Vaccine.—

Charteris (Glasgow Medical Journal) says:

1. The administration of a stock pneumococcic vaccine had no marked effect upon the subsequent course of the disease.
2. The mortality in the vaccine series (21 per cent.) was slightly higher than in the control series (20 per cent.).
3. The early administration of vaccine did not abort the disease, nor prevent complications.
4. Complications were relatively frequent in the vaccine series, viz., one instance of meningitis, two of empyema, and one of hyperpyrexia.

High Blood Pressure.—Osler, in the British Medical Journal, propounds the question: What are the conditions in which we see permanent high pressure, and what are its advantages and disadvantages? For practical purposes one may consider three groups of cases: Simple high tension, hyperpiesis, without signs of arterial or renal disease; arteriosclerosis, with the associated high tension, and renal and heart changes; and chronic nephritis, with secondary high pressure, arteriosclerosis, and heart changes.

Hyperpiesis signifies simple high pressure without signs of cardiovascular disease. We have learned to recognize an average pressure, as taken with ordinary instruments, and the figures given are usually accepted. There are, of course, great variations, usually temporary, but now and again we meet with individuals whose pressure is permanently high—above 180—without, so far as can be ascertained, arterial, cardiac, or renal disease. Cannon and others have shown that in emotional states there is an increase in the adrenal flow, and this is a factor which has to be considered in the high pressure of modern life. This high pressure is not itself the disease, but a compensatory, salutary state, if not for the man, at any rate for his circulation. That this is so may be proved by trying to reduce it below a certain point. One may, for a time, succeed in doing this, but the pressure goes up again, and the man only feels comfortable when he is allowed to live at a certain high level. The disadvantages of high blood pressure are: (1) Transient cerebral attacks such as aphasia, headache, vertigo, flushings, or an anginal attack, or transient bouts of dyspnea with palpitations. But more serious still is (2) the certainty that sooner or later sclerosis of the arteries will follow. He refers to two other causes, one of which has a note of personal appeal. There is an old motto, "It is the pace that kills," and nothing is more certain than that the pace of modern life kills many prematurely through the complications of arteriosclerosis. As a rule men under 60 years of age with primary arteriosclerosis have high blood pressure, indeed the highest known records are in this condition. In this group of cases it is well to recognize that the extra pressure is a necessity—as purely a mechanical affair as in any great irrigation system with old encrusted mains and weedy channels. Yet the victims are often robust, energetic men of great vitality. One should be disabused of the idea, if possible, that the high pressure is the primary feature, and particularly the feature to treat. The two essential factors in maintaining uniformity in a system of land irrigation are keeping the terminal channels free between the rows of cane, and maintaining the drainage. Obstruction in the fields can be overcome by increasing the pressure, to a certain point, but it is cheaper and safer to clear out the weeds. The difficulty is to keep the human irrigation: plant free from weeds, the sud that chokes the capillary bed, through which it takes a greater force to drive the fluids. We too often tinker at the pump and the mains, instead of looking for the real seat of trouble in the fields.

The Combined Internal and External Treatment of Cancer.—Zeller (Munch. med. Wochenschr.) mentions a non-operative method of treating cancer which he has employed for about seventeen years. This first consisted in the administration of silicic acid, one grain three times daily. The results in the nine cases treated in this way were not convincing, since the microscopic diagnosis was lacking, although the symptoms otherwise pointed strongly to cancer. In view of the marked influence apparently exerted by silicic acid and the encouraging results of treatment, the author was afforded an opportunity of further investigating his method under the direction of Czerny. Of the 25 cases treated, 15 received subcutaneous injections of silicic acid ester, 5 took solutions of potassium and sodium silicate internally, and the other 5 were treated both by injections and internal administration of the silicates. Although no complete cure was obtained, an arrest of growth or a diminution in the size of the cancer was generally observed. From his experience he concludes that the silicates may produce a reduction in size or even a cure in cases of small tumors which have not yet undergone necrosis. Since November, 1910, the author has experimented with a combined method, consisting of the internal administration of the silicates and the external application of an arsenical mercury paste. In this way he has treated 57 cases with 44 cures; the majority of these comprised external cancers, the method being as follows: The tumor and its surroundings are first cleansed with pledgets of cotton soaked in benzine; then the paste spread on linen is applied in a thick layer to the growth and its surroundings. When the paste has dried a covering of collodion is applied in the case of small tumors, while in larger and ulcerated cancers a dressing of gauze and cotton is employed. After eight to fourteen days the procedure is repeated. Simultaneously eight grains of a silicate are administered three times daily. When a cure has resulted, the silicates are continued for another year. The paste is said to have an intense destructive action upon the tumor, followed by rapid granulation and healing.

A Fatal Case of Trional Poisoning.—Maunsell (West London Medical Journal) reports the following case:

On April 2, 1912, he was called to a hotel at 8 a. m. to see a lady whom her maid had been unable to wake, and found a well-nourished woman, aged about fifty five, in bed, quite insensible, color good, respirations rather shallow, pulse variable, occasionally running feebly, pupils medium in

size, equal and reacting to light, arms and legs equally flaccid; no smell of drugs in the breath, and no evidence of her having taken any could be found in the room. The proprietress, and the maid who looked after her, and had known her for some months, were not aware that she was in the habit of taking drugs, and had no reason to suppose that she had cause for attempting to poison herself.

He concluded that she had taken an overdose of some hypnotic, probably sulphonal, veronal, or trional. The Dr. gave her strychnine and digitalone hypodermically, and the heart's action becoming stronger and regular, he washed out the stomach. Nothing abnormal was detected in the washings. She was kept under observation and treatment for sixteen hours. Her condition varied, her heart requiring stimulation from time to time, and her respirations once becoming so faint as to be barely perceptible. Toward midnight her condition improved, and though she did not recover consciousness, she moved her head slightly from time to time. During the next day her respirations became somewhat shallower, and toward the evening some moist sounds were audible at the bases of the lungs. She moaned a few times.

The third day her condition became much worse, her lungs filling gradually with hypostatic congestion in spite of varying her position as much as was possible, and of the various remedies tried.

She died at about 3 p. m. without having regained consciousness. The treatment adopted consisted of strychnine, digitalin, and ether hypodermically; hot coffee, introduced by stomach tube; saline per rectum and intravenously; galvanism; oxygen by inhalation and, at the suggestion of Dr. Dodson, subcutaneously; and artificial respiration.

In her room were found a few prescriptions, chiefly for aperient pills. On inquiries being made at the various chemists who had supplied these, one wrote that he had supplied her with two dozen 10 grain trional cachets some four months back, and had repeated the order at the end of March, and other chemists had supplied her with smaller amounts at different times.

At the inquest, beyond evidence of old peritonitis, a gall-bladder full of stones, and fatty change in most of the viscera, nothing of interest was found, with the exception of a few small masses of crystalline substance about the size of orange seeds, the remains of the trional powder, and not more than four or five of these.

The points of interest were, first, the absence of any trace, or history obtainable at the time, of her taking any hypnotics, al-

though she was in the habit of taking them; secondly, the condition of the pupils, which led to the diagnosis; and thirdly, the presence in the stomach, although this organ had been washed out, of small masses of the drug, quite small enough to have passed through the stomach-tube, and which had evidently been caught in the folds of the mucous membrane; fourthly, that there is no satisfactory test for the presence of this class of drug in the urine.

This case, as pointed out by the coroner, emphasizes the danger to the public of this class of drugs, owing to the fact that they can be obtained from a chemist without a prescription.

Treatment of the Vomiting Cough of Tubercle.—Paillard (Journ. de Med. et de Chir.) concludes a thesis on the functions of the diaphragm with a study of the above conditions. Numberless drugs are in use, the patients changing the remedy every four or five days; the vomiting, temporarily arrested, returns more obstinately than ever. Chloroform water—used with success by Matthieu and Roux, though it has failed in the experience of many doctors—seems to give more lasting results than other drugs, but the time of administration is most important. It should be given immediately after the ingestion of food, before the fit of coughing begins. By calming the nervous excitability of the stomach the starting of the reflex is prevented. To the same end Lion gives 20 grammes of bismuth subnitrate diluted with two-thirds of a glass of water. Paillard insists on the necessity of rest after meals; exertion brings on breathlessness, which may sometimes cause the vomiting cough. Rest ought to be taken in the right lateral decubitus, which has two advantages—the pylorus is in a position favorable to the emptying of the stomach, and there is the least amount of displacement of the left diaphragm. But the essential therapeutic point is a short inhalation of oxygen at the opportune moment. Paillard instructs his patients thus: "Have a bag of oxygen constantly at the foot of your bed. After a meal, when you feel the fit of coughing coming on, take up the bag and breathe a few whiffs of oxygen; the fit of coughing will not occur, or, if it does, it will be slight and you will not vomit; if there is any tendency for it to return some minutes later, breathe a little more oxygen. Above all, follow your appetite, and do not let the fear of vomiting restrict your diet. Do not forget that you ought to breathe little oxygen at a time, and that the same bag ought to last you at least four or five days." Under this treatment Paillard has found that the trouble

disappears, generally at the first attempt. The result is lasting in the great majority of cases if the inhalations are continued for some weeks; rarely (three times in thirty-two) the vomiting reappeared, but the combination of chloroform-water treatment with the administration was sufficient to effect a complete cure.—British Medical Journal.

Miscellaneous.

Cardiac Stress—Its Safe and Effective Relief.

Occasions frequently arise when the practitioner must support the heart in order that brief periods of great stress or over-taxation may not result in permanent disability. For instance, during febrile attacks, or at moments of great mental shock, the heart's action is often temporarily embarrassed. At such times a dependable cardiac tonic is needed, and for a good many years Cactina Pillets have been employed by thousands of physicians with the utmost satisfaction.

This carefully prepared preparation of cereus grandiflorus has been found to give the tired heart the exact support and bracing effect required to enable it to meet safely and without discomfort sudden and unexpected drafts on its functional capacity. In the presence of cardiac palpitation, irregular action, tachycardia or the various other symptoms pointing to fatigue and functional weakness of the heart, Cactina Pillets afford prompt relief and rapidly remove the patient's apprehension and fear. Indeed, it is not unusual for a patient to run the whole gamut of the customary heart remedies without the slightest benefit until he is placed on Cactina Pillets. There can be no question that this remedy is especially effective in the cardiac neuroses and it has the great advantage that it can be used without a single fear of any idiosyncratic or untoward effect, or cumulative action, no matter how long or continuously it may be administered.

The practitioner who familiarizes himself with the virtues of Cactina will be gratified to learn the extent to which he can rely on this valuable remedy as a heart regulator and support. And the more he uses it the more he will see that Cactina is not a spur or a goad—but a thoroughly dependable tonic and prop.

The Treatment of the Three Great Symptoms of Ulcer of the Stomach.

Loeper, Paris. The three main symptoms of gastric ulcer are hemorrhage, vom-

iting and pain. The treatment of hemorrhage is the most important part of the treatment of gastric ulcer. The essentials of this treatment are: complete rest in bed, ice per os or in local applications, hot rectal injections and drugs. In subacute hemorrhages perchloride of iron or bismuth salts may be useful; but adrenalin, chloride of calcium and gelatin are certainly better, and may be given per os with excellent results in all cases of hemorrhage. Ergotin, ergotin or adrenalin hydrochloride may be given in hypodermic injections; their action is rapid but temporary and often there is a recurrence of hemorrhage soon after their use. Horse serum or normal saline solution are also useful, the former in hemorrhages of long duration where there are distinct modifications of the blood, the latter in profuse or prolonged hemorrhages to make up for the loss of fluid of the system. Gelatin solution may also be tried hypodermically, but it seems to be less us ednowadays than some years ago. The food must be as bland as possible, and Prof. Loeper is distinctly in favor of the old fashioned milk diet for at least four weeks; however, when the hemorrhage cannot be checked rectal feeding must be tried. Vomiting must be checked by external means and cold applications, (ice, ether, methyl chloride, etc.), since the analgesic mixtures taken per os are likely to cause vomiting. Alkaline powders are very often of great value and generally well borne. For hypodermic injections a mixture of atropin and morphia gives excellent results in most cases. Nitrate of silver may also be of use, but it is likely to give an extra stimulus to the mucous membrane of stomach, which is already so irritable.—Progres Medical.

After Scarlet Fever and Measles.

After the acute diseases of childhood there is no remedy that will do more to hasten convalescence than Gray's Glycerine Tonic Comp. Children are particularly responsive to the tonic effects of "Gray's" and it is always gratifying to see the prompt improvement in the appetite, digestion and general nutrition that follows its administration. The palatability and clean bitter taste of "Gray's" makes it exceptionally acceptable to children.

Loening, of Halle, in the Munchener Medizinische Wochenschrift, 1912, Nos. 9, 10 and 11, says: "Melubrin behaves as a specific in acute articular rheumatism, when given in doses of 15 to 30 grains, three or four times daily. It has no action on the heart and there is no acceleration of pulse. The remedy can even be given if endocarditis is present. It also gives positive

results in chronic articular rheumatism, myositis and sciatica.

"In typhoid fever it is effectual as an antipyretic. Its action in this respect may be compared with that of a cold bath or Pyramidon. In several severe cases of tuberculosis, the persistent antipyretic action of Melubrin was especially valuable.

"Antipyresis was obtained in scarlatina, angina, erysipelas and miliary tuberculosis, and the remedy was tested in croupous pneumonia with remarkably favorable results. I have given over 45,000 grains of Melubrin and have seen no failures and no paradoxical results."

Melubrin has recently been introduced to the medical profession in this country through the medium of the Parhwerke-Hoechst Company, of New York, and samples will be sent to physicians who signify their desire to receive them.

A Systemic Antiseptic.

Although Cystogen ($C_6H_{12}N_4$) is excreted largely through the urine, it has been found in the blood, in the gall-bladder, in the cerebrospinal fluid, in the middle ear and in the secretions of the nasal mucous membranes and the accessory sinuses. It is excreted into the sputum of patients suffering from bronchitis and pneumonia.

The value of Cystogen as a urinary antiseptic has long been recognized but only during the past year or so has it been used in bronchitis, and other infections of the respiratory tract. Its action in these conditions, particularly if given in full doses, is most gratifying. Common colds are aborted if Cystogen is prescribed early, and given at any stage of the infection the pain and congestion are relieved, the excessive secretion is reduced, and the possibility of complications is lessened.

The Army Medical Officer in Ancient Times.

Sir Henry Morris notes that in times as remote as that of the siege of Troy army doctors were held in the highest esteem. The two sons of Æsculapius, Machaon and Podalirius, were, according to Homer, very important persons in the Greek army. A stir was made in the third great Trojan battle, when Paris, "the spouse of Helen, dealing darts around," struck Machaon in the right shoulder. The wounded surgeon was carried off the battlefield by Nestor in the old warrior king's own chariot; and Achilles, sulking in his ship, having watched the progress of the battle, sent Patroclus to inquire what had happened. It was when describing these events that the poet exclaimed:

A wise physician skilled our wounds to heal
Is more than all armies to the public weal.

Amidst all the greatest heroes of the Greek army—Agamemnon, Ajax, Ulysses, Achilles, and many others—Machaon was always spoken of as "the great Machaon," as in the following lines from Pope's translation of the Iliad:

Of two famed surgeons, Podalirius stands
This hour surrounded by the Trojan stands;
And great Machaon wounded in his teut
Now wants that succor which so oft he lent.

In the sixth and fifth centuries, during the wars of Persia with the Asiatic States, Darius I (521-485 B. C.), the "King of the whole civilized world," and "the King of Kings," as he called himself, as well as his successors, had Greek physicians and surgeons in their suites. In the accounts of the wars of the Persians against the Greeks we read of the physician Ctesias of Cnidus as being for seventeen years (414-398 B.C.) in the service of the kings of Persia. Ctesias is specially remembered, not as constantly accompanying Artaxerxes II (404-359 B.C.), but as being a great historian, like Herodotus and Xenophon, of the Persian wars. The Persians, to their honor, conducted their wars with great humanity, and treated their prisoners with kindness, and in many instances even with liberality and favor.

Philip, an Acarnanian, was physician and surgeon to Alexander the Great, and accompanied him through his Asiatic wars. There is an interesting story told of them. When Alexander was lying seriously ill at Tarsus a letter reached him warning him that Philip had been bribed by Darius III to poison him. Having read the letter, Alexander handed it to Philip to read, and after doing so swallowed a potion which Philip had prepared for him. This proof of the unshaken confidence of the king in his physician was soon followed by Alexander's recovery.

In the second century of the Christian era the illustrious Galen was specially summoned by Marcus Aurelius to be with him in his campaign in Northern Italy.—The British Medical Journal.

"Solution of Albuminate of Iron" (Liquor Ferri Albuminatis, Flexner.) Contains 13 per cent. Alcohol. Each teaspoonful of this preparation represents one grain of Dry Albuminate of Iron in permanent solution. Robinson-Pettet Co., incorporated. (See page xiv this issue.)

Mode of Death of the Human Heart.

G. C. Robinson studied this subject by means of the electrocardiograph. He found that in acute infectious diseases cardiac

activity sufficient to give a definite record with the electrocardiograph may continue in the human heart for some minutes after clinical death has occurred. In the seven cases described the cardiac activity continued from six to thirty-five minutes after all the usual clinical signs of death had occurred. In four cases the ventricular outlasted the auricular activity; in two cases this was reversed; and in one case the two parts of the heart seemed to cease synchronously. Marked slowing of the rate of cardiac activity always occurred and there was usually distinct delay in the conduction time between auricles and ventricles. Complete dissociation was seen in three cases. Ventricular fibrillation occurred in two cases, in one of which the ventricles again established a regular rhythm. Evidence of auricular fibrillation was never seen. Characteristic changes in the ventricular electrical complex occurred in all cases. They consisted of a decrease in the size of the R-wave and an increase in the size of the T-wave, and a tendency to a fusion of these waves. There was usually but little change in the duration of the ventricular complex as the cardiac activity gradually ceased. The foregoing observations indicate that when death occurs from an acute infectious disease there is no one point in the human heart which may be considered as the "ultimum moriens."—*Journal of Experimental Medicine.*

The Management of Sciatica.

Watson divides the affection in the following manner:

A. Primary group: (1) Sciatic neuralgia. (2) Sciatic perineuritis. (3) Sciatic neuritis.

B. Secondary group.

The primary group includes sciatic neuralgia. This is supposed to be a functional trouble not associated with definite inflammatory change in the nerve trunk, the condition being purely functional. It occurs most frequently in flabby, anemic, debilitated women, being apparently an expression of nervous exhaustion. Occasionally it is associated with dysmenorrhea, or irregular menstruation. He has seen it alternate with facial neuralgia. The pain is intermittent and the patient may be quite comfortable between the attacks.

Sciatic perineuritis or neuritis is a disease of adult life, and in the writer's experience four times as common among men as women. There is almost invariably a gouty or a rheumatic history. In fully developed cases there is muscular atrophy, paresthesia, with diminution of tactile sensibility, areas of anesthesia and hyperesthesia, tinglings, pins and needles, formication, etc.

The exciting cause of the hyperacute attacks is usually exposure of a limb to cold and wet.

The secondary group of cases includes all those in which the condition is due to involvement of the sciatic nerve, by pressure or the spread of inflammatory processes. Hence the importance of making a complete and systematic examination before diagnosing primary sciatica. It is stated that a rectum overdistended with scybalous masses sometimes exerts sufficient pressure to give rise to sciatica, but whether this be so or not, it is at any rate quite sufficient to aggravate the condition if already present. It includes those cases of sciatica due to tuberculous or osteo-arthritis disease of the spine, bones of the pelvis or hip-joint.

As to treatment, rest in bed is essential and a water-bed is advisable, the sheets being either of wool or cotton and not of linen. Woolen socks and pajamas should be worn. He fixes the limb with a long Liston splint, which adds greatly to the comfort of the patient when he has become accustomed to it, and does away with the startings, which are such a painful feature of the disease. Should this prove unsatisfactory, it should be slung in a fracture cradle. The limb should be kept very warm, preferably swathed in cottonwool. A dose of calomel should be given, followed by a saline in the morning. Salicylates in combination with the bromides and tincture of gelsemium answer well. Aspirin appears to have a specific effect in relieving the pain of fibrositis; and pyramidon, exalgin, acetanilide, and phenalgin are worthy of mention. Potassium iodide is a most valuable remedy, more particularly in chronic cases, especially when combined with glycerophosphates. Tonics are very necessary when the acute symptoms have subsided.

Regarding local treatment, many pin their faith to fly-blisters: the disadvantage of these is that if not effective they interfere in a measure with the adoption of other methods of treatment. Hot linseed poultices, antiphlogistine, a canvas bag containing mustard bran, electra cloth applied along the course of the nerve, are all good methods of counter-irritation.

Anodyne colloid is excellent for relieving local pain, and morphine is given when required. Cocaine is extremely valuable administered hypodermically in doses of 1-10 to 1-2 grain. It should be injected at the seat of pain, but not into the nerve. The balneological and electrical treatment receive detailed attention. High frequency and sinusoidal current are indicated without very clear indications as to the selection of each, as are massage and douching and passive movement. Stretching is advocated

as a last resort. As to further treatment, the patient is especially cautioned against sitting on a cold seat of a draughty water-closet; he is advised to use a felt cover.—British Medical Journal.

The Action of the X-Rays in Leucemia.

David and Desplats state that in studying this subject one is obliged to take account of the destructive action of the x-rays in large doses as well as of their stimulating action in small doses. The former action is not consistent with what has been observed by the authors and by others in the blood and tissue changes occurring in leucemia as the result of the action of the x-rays. These changes are to be explained rather on the basis of the stimulating action of the x-rays. The spleen and the hemopoietic organs are stimulated so far as their deficient functions are concerned, particularly the leucocyte destroying and hemopoietic functions. This stimulation is proportional to the dose of the x-rays and to the functional capacity of the tissues subjected to the action of the rays. This conception does not contradict the theory that leucolysins are present in the circulating blood. But one may regard these leucolysins as the products of secretion of macrophages emanating from the hemopoietic organs.—Archives d'Electricite Medicale.

The Role of Eye-Strain in General Practice.

Cobbledick discusses the association of eye-strain with certain nervous diseases. The types of eye-strain: headaches are frontal and supra-orbital, frontal and occipital combined, occipital alone, and bi-temporal. The vertical headache of the neurasthenic and the intense diffuse headache of migraine are distinct from typical eye-strain headaches and sustain no close relation to such strain. Eye-strain may be an exciting cause of migraine but there is no constant connection. The frequency of the attacks and sometimes their severity may be diminished by treatment of a refractive or muscular balance error, while in a small percentage of cases cure results. The dull headaches which migraine patients are subject to between attacks can always be cured by appropriate lenses. Epilepsy must be cured or relieved by the use of lenses. One can quite understand a motor cortex in such a borderland state of instability as to break down with any peripheral nervous irritation, such as an eye strain, and when eye-strain is the only source of irritation one might expect relief from its correction. Even a few successes make it well worth while to investigate the refrac-

tion and muscular balance of all cases of the functional neuroses, for if cure is only occasional some measure of relief is quite common.

There is a class of cases whose symptoms consist of extreme nervous irritability and change of temper, headaches, and occasionally vertigo, without other symptoms of neurasthenia. This symptom-complex is usually ascribed to functional liver derangement. These cases can be cured by attention to the refractive errors and not by purges. True neurasthenics nearly always present some symptoms of eye-strain. Accommodation is apt to be an effort for them, inasmuch as the muscles of convergence participate in the general condition of myasthenia. The vertical headache, the peculiar sensations of oppression, pulsation and band-like constrictions of the head, have no relation to eye-strain. The other types of headaches, if present, can be relieved by lenses. Eye-strain can hardly be regarded as the cause of *well-marked* neurasthenia though it may operate along with other factors. It may be the main factor in slight cases of neurasthenia in which there is a good family history. These cases are cured by wearing lenses. Neurasthenia is practically always relieved by the correction of existing refractive errors. The same thing applies to such a serious class of cases as the definite melancholias, with or without suicidal tendency.

In children we note dislike of near work, i.e., discomfort on accommodation resulting in inattention at school. Their school reports say that such children are quick and intelligent, but inattentive and unable to concentrate attention upon their work. The correction of the eye strain often affects such children's standing in their classes quite magically. Many of these cases are also complicated by the presence of adenoids.

Most of the functional neuroses in children are very much improved by correction of refraction errors, e.g., grimaces, frequent blinking, shutting one eye, stammering, and nervousness and irritability. The extremely nervous and irritable children are pretty apt to have post-nasal growths.—The Practitioner, London.

The General Practitioner and His Mission.

In a recent book entitled "The Doctor and His Work," C. J. Whitby states that the successful physician is an artist, not a mere prescribing machine; he treats the individual, not a label. To do this he must know the personal peculiarities of the patient. Herein lies the justification of the general practitioner's existence. A man of

sense who has brought human beings into the world; who has tended them through the disorders of infancy; who has seen them grow up, marry, and have offspring of their own whose early years, at any rate, he may well have the opportunity of observing; succeeds in knowing them as a consultant, even of the keenest clinical insight, cannot know them. He knows how they react to diseases and to remedies. He knows how heredity shows itself in matters pertaining to health. In a word, he knows the natural history of disease in a way beyond the teachings of the laboratory or instruments of precision. A man of this kind has a store of knowledge, acquired during long years of observation, and developed by practice till it becomes intuition. This experience cannot be transmitted and for the most part dies with the possessor, but while he lives it is invaluable, and it will be an evil day if ever the charge of sick people is handed over to medical officials who have not the same opportunity of studying their peculiarities, and whose treatment, therefore, must be largely a matter of cut and dried formulæ. There is, moreover, the psychological factor to be taken into account. The general practitioner necessarily learns much of the mental as well as of the bodily structure of his patients, and the faith in him that makes them stick to him as their family doctor for many years is a professional asset beyond price. If there is to be no choice of doctor, as would result from the nationalization of the practice of medicine, this potent element of cure must tend to fade away.—British Medical Journal.

Duration of Immune Bodies in the Blood After Antityphoid Inoculation.

Wollstein notes that in a series of twenty-four persons inoculated with antityphoid vaccine, the immune bodies in the blood reached their height within two months after the first inoculation, or one month after the third, then fell rapidly within the next two months. Only nineteen of the cases could be followed longer, and eight of these were negative for bactericidins within ten months after inoculation, and fifteen were negative after thirteen months. Only one serum reacted in a dilution of 1 to 1,200 of the end of thirteen months. The addition of lecithin to the vaccine did not influence the local reaction after inoculation, nor did it appreciably affect the formation of immune bodies to the typhoid bacillus. There is, of course, no justification for the conclusion that clinical immunity can be determined absolutely by the measure of immune bodies in the blood, since experience has apparently proved the contrary, a fact which can be accounted

for by the latent power of the body cells to react more quickly to a stimulus which has once made them sensitive. That this power lasts for many years after an attack of typhoid fever is well known. It would seem, however, that reinoculation with typhoid vaccine within a year is indicated when exposure to typhoid fever seems imminent.—Journal of Experimental Medicine.

The Baker-Craig Sanatorium.

On November the 28th the Baker-Craig Sanatorium was formally opened in Charleston, S. C. It is a most magnificent institution, thoroughly equipped in every way.

The building is three stories high, and is made of red brick, at a cost of about \$100,000.

The Baker-Craig Sanatorium has accommodations for sixty patients. Patients of all classes will be able to avail themselves of the advantages of this splendid sanatorium. The rates range from \$12 per week to \$50 per week. Some of the private rooms, in fact, may be had for only \$17.50 per week, while those that cost \$50 per week are elegant apartments, consisting of bed room, bath and sun parlor.

The rooms are all on the outside of the building and are therefore all of them well lighted and cool in summer. Every care has been taken to secure proper ventilation and at the same time do away with draughts. Thus all of the many windows are equipped with reflecting boards, devices which permit of the raising of the window to admit the breeze and yet at the same time preclude the possibility of an injurious draught.

In addition to a very complete obstetrical room, equipped with all the best appliances and instruments, there are two operating rooms, which leave nothing to be desired. These are on the north side of the building, admirably lighted both by sunlight and electricity. The operating tables are of two designs, both of them the best and most modern used in the science of surgery. Every detail of the equipment of these rooms has been worked out with the greatest care and the result is that nothing is lacking or in need of improvement.

Patients will enter the sanatorium through an ambulance driveway which leads directly to the elevator.

Other features which must receive notice are the nurses' dining room, the offices of the management, the ample basement, affording large storage rooms, the X-ray room, the boiler and water heating plant, kitchen and refrigerating room, the modern cleansing and disinfecting apparatus, the instrument cabinet, the convenient consultation rooms, the

spacious piazzas, protected in winter by glass from the cold winds, the broad fire escapes, the handsome imported rugs, the beautiful silver for dining room use and use by patients, the elegant and expensive linen, bed room furnishings, and many other features which would strike the eye of an expert and convince him at once of the immense amount of care and skill devoted to the building and equipping of this superb sanatorium.

An important adjunct is the handsome cottage to the south of the main building designed to be quarters for the nurses.

The proprietors of the sanatorium and the men who have carried through the greatest project of establishing such an institution in Charleston are Dr. Arch E. Baker, the well known physician and surgeon of Charleston, and Dr. Lawrence R. Craig, formerly of Dillon and Chester. Drs. Baker and Craig will have under them a full and competent sanatorium corps. Miss Alice B. Commer is superintendent of nurses and is herself a nurse of wide practical experience and thorough training. Miss Commer was formerly head nurse at the Riverside Infirmary and she has recently fitted herself still better for her duties at the new sanatorium by taking a special course of study in Chicago and visiting and inspecting the best sanatoriums in different parts of the country. Under Miss Commer will be a corps of twenty-five trained nurses brought together from many parts of the country. Special care has been used in selecting these nurses and they are all experts in their profession. Most of them have already arrived and begun their duties at the new institution.

X-Ray Investigation of Spastic Constipation.

Singer and Holzknecht have studied the condition of the colon in cases of spastic constipation by means of X-rays, subsequent to rectal injection of about 1,700 c.cs. bismuth solution per rectum. By this means it can be clearly demonstrated that in the large majority of such cases the diameter of the distal portion of the colon is much diminished. Under normal circumstances the diameter of the bismuth shadow in the colon measures from 4 to 6 centimetres, but in spastic constipation it is only from 2 to 3 centimetres. This is in accordance with the general idea that so-called spastic constipation is actually due to hypertonus of the bowel. In the proximal part of the colon, on the other hand, a normal tonus prevails, and the actual boundary between the two parts into which the colon is thus divided—namely, the hypertonic part and the normal part—may exist anywhere from

the hepatic flexure to the end of the descending colon.—Munch. med. Woch.

Pyelitis in Infancy and Childhood.

An extremely good account of this affection is given by Still, in a paper printed in the North of England Clinical Journal for January, 1912. He remarks that unrecognized acute pyelitis in infancy gives rise to prolonged fever of most severe degree with profound constitutional disturbance, which may end in death. Recognized and treated with appropriate drug, it often subsides in a few days, and, even if symptoms persist for a time, they quickly become less severe, yielding to treatment before long. After reference to the acute cases, with peculiar and almost sudden onset by rigor or convulsions, the extremely misleading cases in which the disease has become chronic are discussed, as when a child is brought to the doctor solely for wasting and fretfulness. Finally, the virtually specific treatment with potassium citrate is described, and emphasis is laid on the paramount necessity of maintaining the constant alkalinity of the urine for at least a week or ten days. A child of three may require 20 grains or more of the potassium salt every two hours; an infant, 10 grains every two hours.—Universal Medical Record,

Circumscribed Lichenification.

Dore reports the case of a patient, aged 40, who presented a patch of circumscribed lichenification in the right lumbar region which had existed for three years. The plague showed the characteristic aggregation of glistening round papules, with a certain amount of thickening and slight pigmentation of the skin, but the three zones described by Brocq could not be differentiated. During the past four months the patient had similar patches on the arms, thighs and legs, but these had recently disappeared. There was a generalized prominence of the follicles, especially on the legs, and the hairs were rubbed away by the constant scratching. According to the patient's statements, the pruritus preceded the formation of the skin lesions.—Proceedings of the Royal Society of Medicine.

Laryngitis.

This disease, which is an inflammation of the mucous membrane of the larynx, usually results from exposure to cold. The attack may be ushered in by a chill, followed by fever and pain. There is a hoarse cough, sensitiveness of the throat and difficulty attached to eating—enough; in fact to cause the patient to decline food

even when it is temptingly offered.

If Glyco-Heroin (Smith) is used sufficiently early, the attack may be successfully aborted. However, if treatment is not begun, the inflammation extends from the larynx to the neighboring tissues, the fever increases, cough becomes more frequent, breathing becomes more labored and the patient suffers the loss of much vital force. Laryngitis not infrequently becomes chronic, and as such is a constant source of pain and discomfort to the patient. When the disease has assumed the chronic form, the physical state of the patient is much depressed, flesh is lost and there is almost complete absence of energy.

It is the aim of the alert practitioner to report, in the beginning, to measures which prevent laryngitis from developing into a chronic form. To this end he may advantageously make use of Glyco-Heroin (Smith) as soon as the first symptoms of an attack make their appearance.

It is worthy of mention that the preparation is also of conspicuous value in the treatment of both acute and chronic pharyngitis.

The Treatment of Hernia in Infants.

Savariaud recommends Lorthiore's operation for hernia in infants, which he has practiced in 100 cases, and with excellent results in each, in infants over six months.

For hernias of ordinary size an incision of 2 cm. is made, and after separating the subcutaneous cellular tissue and placing the testicle, hernia and spermatic cord to one side, the tissues overlying the cord are cut through and the sac is exposed and isolated. It may not be necessary to ligate the sac before removing it; the resection should be done as high as possible. The skin incision is closed with small clamps, which are left in place for twenty-four hours or longer. Primary union takes place in most cases. No dressings are needed, as the anterior wall of the inguinal canal remains intact.

The remote effects of the cure of the hernia are striking; the malnutrition and digestive disturbances so often accompanying this condition disappear very rapidly. —*La Tribune Medicale.*

The Effects of Tropical Sunlight.

Freer in the Philippine Journal of Science has a most interesting article on the above subject. He concludes from investigations extending over two years that a climate, such as that of the Philippine Islands, is not by any means deleterious to the white man, if he takes ordinary precautions which are not as elaborate as those he would take

in a northern climate to keep out the cold. The individuals need only to seek the shade to avoid any deleterious results from even the greatest insolation. If exposure to the sun is necessary, as is the case with troops on the march, adequate protection is afforded by light, preferably white, clothing and helmets. Perspiration is a great factor in keeping a man normal under the conditions that obtain in the tropics. Many of the untoward effects attributed to the sun are probably due to the rapid loss of water from the system and could be avoided if the individual were in a position to drink enough to preserve the fluid equilibrium of the body.

The figures given for the blood-pressure are of interest and show that Americans in the Philippines maintain their arterial tension at practically the same level as that met with in temperate climates. This finding is in agreement with what was found to be the case with Europeans in Bengal, where the temperature, and particularly the humidity, are on a much higher scale than obtains in the Philippines.—*Indian Medical Gazette.*

"Many cases of acute coryza and nasopharyngeal irritation are often due primarily to the streptococcus rheumaticus and respond to the usual rheumatic therapy."

In these cases, commonly called "colds," generally deep-seated, painful and exhausting, Tongaline mitigates the congestion and by rapid elimination of the poisons or germs, promptly relieves a condition often very obstinate and if not corrected within a reasonable time, attended with serious results and always with a tendency to become chronic.

For special stimulation to the kidneys, Tongaline & Lithia Tablets; if malaria is indicated, Tongaline & Quinine Tablets.

A New Therapeutic Agent.

We wish to call our reader's special attention to Vanadiol, one of the Vanadium products. Remarkable results have been obtained by many physicians through the administration of this new therapeutic agent, a derivative of the rare metal Vanadium.

Vanadiol being the greatest oxygen carrier known, is especially indicated in anemia, chlorosis, neurasthenia, diabetes, Bright's disease, pneumonia, tuberculosis, etc.

A reprint of Dr. William Franklin Harpel's remarkable paper on the treatment of tuberculosis by Vanadium will be sent to any reader of the *Charlotte Medical Journal* on request.

Congestive Dysmenorrhea.

Dr. F. H. Davenport, A.B., M.D., Assistant in Gynecology, Harvard Medical School, in his book on "Disease of Women" and under the above caption refers to the treatment of congestive dysmenorrhea and the use of anodynes. He says, "It is by all means wisdom to avoid in these cases, if possible, all the use of stronger sedatives and anodynes."

In referring to the use of medication in these cases, Dr. Davenport, in this most excellent work on "Non-Surgical Gynecology," says: "Hayden's Viburnum Compound has seemed to be the most effectual remedy of this class, given in hourly teaspoonful doses in hot water, for five or six times."

That Hayden's Viburnum Compound is of inestimable value in the treatment of dysmenorrhea is not only indicated by its employment by gynecologists of today, but in the past by no less an authority than J. Marion Sims, who prescribed it and recommended its employment.

Hayden's Viburnum Compound is not a narcotic and contains no habit-forming drugs. It is a product of known composition and as a uterine sedative it holds first place in the opinion of many physicians as not only a dependable therapeutic product, but a remedy which is safe to administer to their patients. Given in teaspoonful doses, administered in hot water, it will prove most effective.

State Board Examination Questions of Louisiana.

ANATOMY.

1. How many tarsal bones are there? Name them.
2. Describe briefly the cervical vertebrae.
3. Give origin and insertion of pectoralis minor, coracobrachialis, pronator radii teres, sartorius, and biceps.
4. Name the branches of abdominal aorta.
5. Give the relations of the femoral vessels in Scarpa's triangle.
6. Describe the blood supply of the cecum and vermiform appendix.
7. What are the relations to the deep epigastric artery of (a) an oblique inguinal hernia; (b) a direct inguinal hernia?
8. What is Gimbernat's ligament?
9. Tell briefly what you know about the fifth cranial nerve.
10. Name and describe briefly the membranes which surround the spinal cord.

PHYSIOLOGY.

1. Describe the anatomical and histological structure of (a) the neuronal cell-

body; (b) the axone; (c) what is the function of each structure?

2. What is the tactile sense? (a) Where is it most acute; (b) what is its cognitional value; (c) what is its relation to the central nervous system?

3. Give the general characteristics of urine as to (a) quantity, (b) reaction, (c) specific gravity, (d) color. When do these vary?

4. Name the enzymes of the pancreatic juice and describe separately the part each plays in digestion.

5. What factors, chemical and physical, are concerned in gastric digestion?

6. Describe briefly the chemical changes, the thermal changes, the electric changes, changes of form, in muscular tissue when in a state of activity.

7. What is the character of contraction (a) in non striated involuntary muscles, (b) in striated voluntary muscles, (c) give examples of each.

8. What are the functions of the blood plasma and of the blood corpuscles?

9. Describe the types of normal respiration and how influenced by (a) age, (b) sex, (c) race.

10. What forces are involved in the circulation of the blood in the arteries and in the capillaries?

CHEMISTRY.

1. What is the chemical composition of bone?

2. Mention six elements used in medicine and give their symbols and atomic weight.

3. Define (a) analysis, (b) synthesis, (c) cohesion, (d) chemical affinity.

4. Convert 67 degrees Fahrenheit into Centigrade.

5. What is the process termed when oxygen unites with another element?

6. Give a test for diacetic acid and state its clinical significance.

7. What is Ehrlich's diazo reaction and state its clinical significance.

8. Give a test for indican and state its clinical significance.

9. Give an emergency method of preparing ferric hydroxide for use in a case of poisoning by arsenic.

10. Give a test for HCl in the gastric contents.

THERAPEUTICS.

1. What are digestants? (a) Name the principal official digestants; (b) what are the therapeutic uses of each?

2. What are the indications and contraindications to the use of opium?

3. What is serum therapy and how would you treat a severe case of laryngeal diphtheria and what would be your prophylaxis

in a suspected case of tetanus?

4. What are the therapeutic uses locally and internally of atropine sulphate?

5. Mention four ways in which antipyretics reduce body temperature.

6. How would you treat a case of arteriosclerosis?

7. Give the therapeutic uses of the different preparations of mercury.

8. How would you treat a case of syphilis in its different stages?

9. What are the indications and the contraindications in the use of ergot?

10. How would you treat a case of hook-worm disease?

PATHOLOGY.

1. What post-mortem changes occur in the tissues?

2. What is the cause of a rise in body temperature? Explain the mechanism.

3. Define atrophy. Give the varieties of atrophy.

4. Differentiate fatty infiltration and fatty degeneration.

5. Define hyperemia, anemia, leukemia.

6. Explain what is meant by the terms physiologic and pathologic leucocytosis respectively. State whether a leucocytosis is present in the following diseases: typhoid fever, malarial fever, appendicitis, acute miliary tuberculosis.

7. What is an embolus? Mention frequent sources of emboli and state the sequels of embolism.

8. Describe, in the order of their occurrence, the cardinal signs of inflammation and explain them. State also the terminations of inflammation.

9. Describe the reparative processes following the fracture of a long bone.

10. What is the line of demarcation in gangrene?

OBSTETRICS.

1. Describe the fetal circulation.

2. What is the conjugate and transverse diameters of the inlet and outlet of the pelvis? Give the anatomical points of the measurements.

3. Enumerate (a) the causes of delayed labor, (b) the dangers, (c) management.

4. State the causes of post-partum hemorrhage and the treatment.

5. Describe the third stage of labor, the dangers which attend it, and the methods of conducting it.

6. Mention two conditions liable to cause prolapse of the cord and the treatment for one condition mentioned.

7. What can be determined by external palpation of the pregnant woman at term?

8. Give (a) causes, (b) diagnosis, (c) mechanism, and (d) management of a face presentation.

9. Name the diameters of the fetal head.

10. Describe an embryo at the second month.

GYNECOLOGY.

1. Give a description of the physiology of menstruation.

2. What are the causes of hemorrhage from the non-pregnant uterus? Give the treatment for any two of the number which you mention.

3. What is urethral caruncle and its treatment?

4. Give the etiology and treatment of acute general cystitis.

5. Why is gonorrhea in women a grave disease?

6. Define salpingitis and state its causes and pathology.

7. What are the most common benign growths found in the cavity of the uterus?

8. Give the symptoms of ovarian cyst. What is the treatment?

9. Give the physical signs of cancer of the uterus at an early stage.

10. Describe the technique for supravaginal hysterectomy.

SURGERY.

1. How would you treat a compound fracture, say, of the tibia?

2. What is talipes equinovarus? Give treatment.

3. Give diagnosis and treatment of epithelioma of the lower lip.

4. Give symptoms and treatment of ulcer of the pylorus.

5. A woman comes to you with a lump in her breast, what steps would you take in order to make a diagnosis and how would you treat it?

6. Give signs, symptoms, and treatment of aneurysm of the popliteal artery.

7. What is a wen? How would you treat it?

8. What is varicocele? How would you treat it?

9. Give symptoms and treatment of enlarged prostate.

10. Describe briefly the Bassini operation for inguinal hernia.

HYGIENE.

1. Name and describe briefly the different methods of domestic water purification.

2. What are the most important foreign ingredients, organic and inorganic, in water.

3. What are the major sanitary details in the production and marketing of pure milk?

4. What is Pasteurization of milk and what are its advantages and disadvantages?

5. What are the relative merits of formaldehyde and sulphur dioxide as disinfectants, and in what form and in what manner are they applied?

6. What are the sources of the impurities in air and what relation do these impurities bear to health?

7. What sanitary measures should be instituted in the care of a typhoid patient?

8. What is understood by (a) natural immunity; (b) acquired immunity; (c) give examples; (d) what are the causes of immunity?

9. How is tuberculosis detected in the cow?

10. What diseases of the (a) skin, (b) spine, (c) respiratory tract, (d) digestive system, (e) throat are especially prevalent in school children, and how would you detect eyestrain, adenoids, trachoma, and infectious catarrhal conjunctivitis?

W. B. Saunders Company, medical publishers, are now established in their new building on West Washington Square—an ideal site right in the heart of Philadelphia's new publishing center.

The remarkable success of this House and the rapid growth of their business, with the increased facilities which this growth demanded, necessitated removal to larger quarters. They therefore erected a seven-story building, housing all their departments under one roof.

Constructed of reinforced concrete, the building is absolutely fireproof and equipped with every modern aid for the manufacture and distribution of medical books and for the comfort and convenience of their employees.

A cordial invitation is extended the profession to inspect the new plant.

The Rapid Cure of Amebic Dysentery and Hepatitis by Hypodermic Injections of Soluble Salts of Emetine.—Rogers

(British Medical Journal) says that ipecacuanha is a drug with an interesting past and a brilliant future. The Brazilian root was first brought to Europe by Piso in 1658, and was successfully used by Helvetius in the treatment of Louis XIV, and sold as a secret remedy to the French government. It was given for dysentery, chiefly in small doses, by Twining and many other Anglo-Indian physicians, but it was not until 1858, exactly two centuries after Piso, that Surgeon Docker introduced the use of large doses of powdered ipecacuanha in the treatment of severe dysentery in Mauritius, with the remarkable result of reducing the death-rate of the disease from a former annual rate of 10 to 18 per cent. to only 2 per cent. His excellent results were rapidly confirmed by numerous physicians in India, but it was not until 1880 that Docker's great services to humanity were tardily rewarded by the government with a gratuity of £400!

Maclean and Norma Chevers in 1886 advocated the use of ipecacuanha in the treatment of acute hepatitis, but two or three decades later the pendulum again swung in the opposite direction, and the drug was largely replaced by ammonium chloride in hepatitis and by salines in dysentery, chiefly as a result of the success of the latter in very early and mild attacks of colitis. Indeed, only a few years ago a committee of London pharmacologists actually advised the omission of this invaluable drug from the medical panniers to be taken on field service by the army in India, so far had the Brazilian root fallen in the estimation of the medical profession. During the last few years ipecacuanha has once more gained ground, mainly on account of Sir Patrick Madson's advocacy of it in dysentery, and of the writer's success in the treatment of early acute amebic hepatitis.

Doubtless the principal cause of the vicissitudes of ipecacuanha is the production of very disagreeable and exhausting nausea and vomiting by the large doses which are essential to obtaining its full curative effects. This serious drawback is only partially overcome by the present methods of giving the drug in salol or keratin-coated pills, and the use of opium, chloral hydrate, or tannic acid to check vomiting. Last year Vedder showed that emetine, the principal alkaloid of ipecacuanha, has the power in high dilutions of destroying amebæ in broth cultures, although it is not clear that this was a pathogenic form, which most recent authorities believe has not yet been cultivated. Rogers has, therefore, tested the effect of the soluble emetine hydrochloride or *A. histolytica* in dysenteric stools, and has found that, on placing a piece of mucus containing numerous active amebæ in normal saline solutions of this salt, the pathogenic organism is immediately killed and materially altered in its microscopical appearance by a 1-in 10,000 solution, while after a few minutes they are rendered inactive, and apparently killed, by as weak a solution as 1 in 100,000.

He therefore decided to try if this powerful alkaloid can be safely administered hypodermically in the treatment of amebic disease, and has obtained such striking results in a few patients that it seems to be advisable to make them known to others.

A New Hypnotic.

Geissler reports his experiences with luminal, a new hypnotic, whose chemical constitution warrants the name phenylethyl barbituric acid. It differs from veronal by the substitution of an ethyl by a phenol group. It is soluble with difficulty in water,

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—owing their prolongation to constitutional or systemic weakness
—are usually bound to continue until the nutrition and vitality of the whole body are substantially improved. The well-known capacity of

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but readily dissolves in feeble alkaline solutions, from which it can be again precipitated by the addition of an acid. Its hypnotic properties are usually seen after a dose of .2 to .3 gramme, but .4 gramme produces sleep with certainty. The sleep is deep and dreamless, and is not followed by any headache. The drug can be given subcutaneously, and indeed produces the best effects when administered in this way. It is particularly useful in cases of great excitement with muscular restlessness, such as mania, delirium tremens, &c., and in such conditions is an effective substitute for hyoscin. —Munch. med. Woch.

Splenic Anaemia Cured by Operation.

Klemperer and Muhsam report a case of splenic anaemia occurring in a man aged thirty-six. The red blood corpuscles numbered two and a half millions, the white cells were normal, and the spleen was enormously enlarged. The case was not one of aplastic leukæmia, nor of Banti's disease, and was regarded as typical splenic anaemia. After failure to effect any improvement by other means, operation was advised, and the spleen was removed. Two months later the red cells numbered five and a half millions, and a gain of twenty pounds in weight was recorded. —Berlin. klin. Woch.

Ætiology of Arterio-Sclerosis.

Saltykow discusses the ætiology of arterio-sclerosis. He points out that the fatty changes so often found under the intima in young individuals constitutes the first stage of atheromatous degeneration, and he further insists on the fact that arterio-sclerosis is really a disease of early life. Owing to the very gradual development, however, of the progressive degenerative changes highly advanced grades of sclerosis are met with only in advanced life. Two theories regarding the causation of sclerosis are widely held—the one that it is due to increased blood pressure, and the other that it is produced by toxic influences. The first of these theories is dismissed, and it is strongly maintained that the changes caused by injections of adrenalin are of quite a different nature to true arterio-sclerosis. As toxic causes alcohol, tobacco, and lead are mentioned; and in addition it is pointed out that chronic infective diseases, such as phthisis, are frequently associated with early arterial changes. Recurring appendicitis, diphtheria, chronic gastro-enteritis, and otitis media are also regarded as possible causes. In support of the toxic theory the writer points out that injections of micro-organisms in animals rapidly produce arterio-sclerosis. Once arterio-sclerosis is

established heightened blood pressure may have a secondary effect.—Corresp. Bl. f. schweizer Aerzte.

Cerebellar Cysts.

Williamson discusses the varieties of cerebellar cysts, and points out that the frequency of such cysts is about one to every six solid cerebellar growths. Apart from cystic tumors, in which the tumor can be recognized by the naked eye, and parasitic cysts, the following varieties have been described: (1) Cysts with only a minute microscopic fragment of tumor growth in their walls; (2) serous cysts without the slightest trace of new growth in their walls; (3) cysts connected with the fourth ventricle; (4) cysts following hæmorrhage or softening; (5) dermoid cysts. Unlike the prospects of cure by operation of cerebellar tumors, the prospects of successful treatment by operation of cerebellar cysts is extremely good, and in all cases in which a cerebellar tumor is diagnosed operation should be recommended, as, if the tumor should prove to be of cystic nature a cure, either temporary or permanent, is likely to be achieved; while, if the tumor is solid, relief may follow the decompression.—Review of Neurology and Psychiatry.

Intussusception in Children.

Koch and Oerum analyze the records of 400 cases of intussusception occurring in Danish children. The most common form of intussusception is the ileo-cæcal, and they are strongly of opinion that a necessary condition for its occurrence is a floating cæcum. Sixty per cent. of all cases occurred in the first year of life, and the proportion of boys to girls was 2.2 to 1 calculated for all ages under one year. As predisposing causes, ascariæ, the presence of polypi or of a Meckel's diverticulum, and the giving of laxatives are mentioned. Colicky pain, vomiting, the passage of blood-stained mucus, and the presence of a tumor are regarded as the cardinal symptoms; a tumor being palpable in 85 per cent. of all cases. An examination of the records shows that non-operative treatment gives the best results in children under a year old, while in children over a year primary operation yields just as good results as the bloodless treatment, and is in general to be preferred.—Edinburgh Medical Journal.

Treatment of Acute Articular Rheumatism.—Lemoine (The British Medical Journal) believes that inflammation of the throat is one of the earliest symptoms of rheumatism, and recommends a gargle of 20 grams of sodium salicylate in 1000 grams of distilled water. He says that this drug

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Through the system of examination made at the Sanitarium, the real causes of the patient's ill health are determined. Then follows a course of health building along strictly scientific lines—hydrotherapy, phototherapy, electrotherapy, mechanotherapy, diathermy, dietetics, medical gymnastics, out-of-door treatment and health training—all under expert direction.

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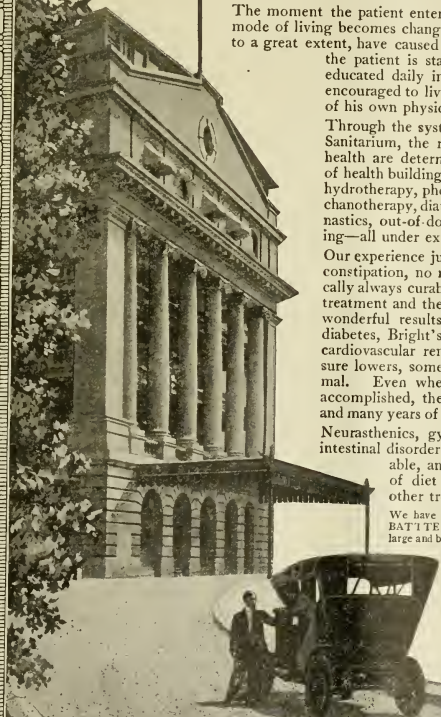
Neurasthenics, gynecological cases, and gastrointestinal disorders of all sorts, are generally curable, and always helped by regulation of diet and by proper hygienic and other treatment and training.

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is the best remedy in rheumatism, and gives it in cachets, or sodium salicylate 10 grams, syrup of currents 80 grams, distilled water 70 grams. This should be given in divided doses day and night, endeavoring to administer from 6 to 8 grams in twenty-four hours in the adult. In children 1 gram per diem if the child is two years or less, and 2 grams if four or five. If the drug is not well borne in such large doses, these must be decreased 5, 4 or 3 grams until tolerance is produced. It should not be given if nephritis with the presence of casts in the urine exists, but if the albuminuria is slight and there are no casts it may be given with caution. If the myocardium is affected, and the pulse irregular, care must be taken not to depress the heart further, but if the endocardium or pericardium are implicated, the salicylate may be given, but it must be withdrawn in cases associated with delirium and other signs of cerebral excitement; in pregnancy it must be given with caution. Aspirin is less efficacious than the salicylates, and should be given in divided doses up to 1 to 3 grams per day, according to age; pyramidon also has its uses. If these remedies in succession do not produce an amelioration, they can be combined with advantage sodium salicylate 0.25, aspirin 0.15, pyramidon 0.15. Painful swollen joints are best enveloped with methyl salicylate, or preferably mesotano-vaseline 20 grams, lanoline 20 grams, mesotane 5 grams. If the heart is flagging—and this organ should be examined every day—digitalis, digitalin, or infusion of the leaves should be given or Adonis vernalis. In cases complicated with nephritis cupping of the loins, milk diet, and laxatives are indicated. In cases of cerebral rheumatism warm baths (37°) every three hours, and cold to the head are essential, and potassium bromide or ammonia but not opium or chloral. In cases of pleurisy a mustard plaster and cupping, or if the pain is bad, a hypodermic injection of morphine are in place. Patients who have suffered from one attack, being most liable to a second, should be protected as far as possible from all causes, as cold, damp, overwork, etc., which tend to produce the disease.

Advantages of Subcutaneous Elastic Ligature in Treatment of Umbilical Hernia in Children.—Brun (Arch. de Med. des Enf.) says that Nota, of Turin, has used the elastic ligature method since 1890 in 244 children. An elastic cord, thirty or forty cm. long, is passed around the base of the hernia beneath the skin by means of a long curved needle. The hernia is then reduced and held in place by the finger while the elastic cord is drawn tight enough to obliterate the opening. The ends of the

cord are then tied with silk close to the skin and cut off. The rubber cord cuts through the soft tissues in its grasp, and the space is filled in with scar tissue completely closing the hernial ring. At the end of twelve or fifteen days when the entire cord comes out from the tiny opening in the skin, a thick solid scar is left behind. The dressings are not changed for ten days, at the end of which time a new dry dressing is applied and the child should wear a cloth binder for two or three months. No complications of any kind resulted but there was one recurrence in a young infant with a very large hernia, due to an attack of coughing. This case was also cured by the same operation six months later. In infants no anesthesia is required, but Nota uses ethyl chloride for the older children. The operation is a very short one and the children are allowed to be taken home at once.

Operative Treatment (Lane) of Simple Fracture of Long Bones in Children.—

Sampson (London Lancet) says of the long bones, 46 cases have been recently examined by Sampson. Of these, 42 had been operated upon, and of the recent cases, 34 in number, 30 gave perfect anatomic and functional results, 3 were perfect functionally, but not anatomically, while 1 was both functionally and anatomically imperfect. Of the 7 cases of mal-union operated upon, 3 gave perfect results, 1 was imperfect anatomically, but with perfect function, while 3 were imperfect both functionally and anatomically. Of the imperfect cases, 4 were so slight as not to interfere with function. Sampson argues from these results for early routine operations, as the results are so much better when operation is undertaken early. Sixty patients have been "plated," and of these 35 have been examined. Of the 31 recent cases, 27 show perfect results, 3 show perfect function, while 1 has a slight loss of function and is classed as imperfect. Of the 3 mal-united cases, 2 gave a perfect result and the third a perfect functional result. One case of non-union gave a very bad result, as no plates could be used. A number of other minor mishaps occurred without serious consequences. The plates undergo oxidation, but there is no corrosion, and no rarefying osteitis has been seen. Slight lengthening of the operated side has been frequently observed.

Religion and Sanitation.

The religious customs of the non-Christian portion of the British Empire are generally brought into public notice by the problems of hygiene, health, or sanitation which these customs raise. The latest en-

ample of this is the comprehensive survey which the Government of India is instituting into the best methods of improving the sanitary arrangements at the various centers where Mohammedan and Hindu pilgrims meet for starting on their journeys to Mecca or for other religious purposes. The number of such pilgrims has increased so enormously with modern traveling facilities that there is always a serious risk of the importation as well as the outbreak of disease at these centers. The inquiry is expected to co-ordinate the arrangements which have already been enforced at some of the more important centers. Each province will have the benefit of the Imperial Sanitary Commissioner's presence, who will draw up a report on the result of the local inquiries. On each local committee will be a representative of each railway which is engaged in the pilgrim traffic. These facts have peculiar interest as showing how Western science complicates at first Eastern religious customs by making their observance possible to even larger numbers of the devout, and then, by regulations necessary for the public health, may end in modifying them to a degree not foreseen or contemplated.—The Hospital, London.

Treatment of Infantile Syphilis with the Milk of Goats Injected with Salvarsan.

—Jeanselme, Vernes and Bertrand (Paris Medical), reports the results of a case of congenital syphilis in a child of five weeks with the milk of a goat treated with seven injections of salvarsan into the jugular vein (30 cg. for the first, and 40 cg. for the other injections). The symptoms in the child improved slowly for a time, and then remained stationary, necessitating recourse to mercurial treatment. The milk, tested by Bougalt's method showed no trace of arsenic, and, when compared with milk containing a known quantity of arsenic, led the authors to conclude that the amount of arsenic present in the goat's milk, if any, must have been not more than 1-10 mg. per liter. The authors mention a case of Jesionek (Munich. Med. Woch., 1911, No. 22) concerning a child of five years who was treated with the milk of a goat injected with 40 cg. of salvarsan on the supposition that the drug was excreted in the milk. In this case rapid improvement was reported, but Jeanselme's observations do not confirm this.—British Medical Journal.

Iron Metabolism in Pernicious Anaemia.

According to Kenerkhnut normal urine contains daily about one milligramme of iron and normal faeces twenty-five milligrammes. In anaemia, especially perni-

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icious anaemia, and a myeloid and lymphatic leukaemia, an increase in the output of iron in both urine and faeces is often found. There are some anaemias in which this increased output accompanies a great breaking down of either red or white corpuscle or both. In chlorosis a lessened output of iron is the rule, and some stages of pernicious anaemia also show a lessened output. The increased output of leukaemia is probably more often due to lessened storage in the spleen than to increased cell destruction. During the X-ray course of treatment there is no increase of iron output as compared with untreated cases of leukaemia.—Virchow's Archiv.

Optic Neuritis in Infectious Diseases.

Duboit reports the observation of two cases of optic neurosis following measles, of one case scarlatina, one case after typhoid, and two cases after influenza. The symptoms appeared in measles fifteen and seventeen days, in scarlatina nineteen days, and in typhoid twenty days after the onset of the other sickness. The clinical symptoms in general and the results of lumbar puncture enable in all cases meningitis to be excluded. The result was in every case favorable,—Archiv. f. Augenheilk.

Benzol in Treatment of Leukaemia.

Kiralyfi has treated a series of cases of splenic leukaemia with large doses of benzol administered internally, and states that under its influence leukaemic blood rapidly improves. The number of leucocytes in one case fell from 300,000 to normal, and at the same time the spleen diminished very much in size. No change, however, was observed in the relative proportion of the different varieties of white cells. The writer sees in benzol an agent which excites a powerful influence on the haematopoietic system.—Wein. klin. Wochenschrift.

Bilateral Brachial Neuritis.

Hoffman points out that acute lateral brachial neuritis is rare, and at the same time a most important disease to recognize inasmuch as the prognosis in such cases is so much more favorable than in other forms of arm paralysis. He has observed three cases, all of which presented somewhat similar symptoms. One of these, a laborer, aged sixty, woke one night with pain and loss of power in both arms. Reaction of degeneration soon set in, and was followed by muscular atrophy, pain, paraesthesia, and later complete loss of sensation. Treatment by electricity, massage, and other means brought about an almost complete cure. Both the other cases completely recovered. Such cases closely resemble acute poliomyelitis; the onset is sudden, and often at night, paralysis rapidly reaches a maximum, tendon reflexes are absent, and muscular atrophy sets in. Furthermore, pain is not unknown in cases of acute poliomyelitis. The differential diagnosis depends on the absence of severe general symptoms, the symmetry of the affection, the long duration of the pain, the complete anaesthesia that sets in later, and sometimes on the typical nerve distribution of both the motor and sensory paralysis.—Munch. med. Woch.

Link the Past with the Present.

J. Marion Sims many years ago said, "For severe Dysmenorrhea I have found Hayden's Viburnum Compound of great service."

What was true as to the therapeutic value of Hayden's Viburnum Compound in the time of Sims is just as much of a fact today. As a remedy in the treatment of Dysmenorrhea, Amenorrhea and other functional irregularities of the uterus and its appendages, H. V. C. is dependable in action, and as it is of known composition and contains no narcotics it is safe to prescribe.

As a uterine tonic and antispasmodic it is of particular service, and to any physician who desires to clinically demonstrate its therapeutic action samples and literature will be forwarded upon request to New York Pharmaceutical Co., Bedford Springs, Bedford, Mass.

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Treatment of Gastric Ulcer.—Dawson (British Medical Journal) says that he would consider gastric ulcer as "mucus ulcer" and "chronic ulcer." By mucus ulcer the Dr. denoted an ulceration of the mucous membrane. It was usually a sub-acute condition, tending to heal quickly and completely. Sometimes, however, it progressed rapidly into perforating gastric ulcer, or took on the characteristic of a

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chronic lesion. By chronic ulcer he understood a condition involving most or all of the coats of the stomach, usually appreciable by sight and touch without opening the stomach. Duodenal ulcer was included because the duodenum above the common duct was embryologically, functionally, and pathologically closely related to the stomach, and the problem on the two sides of the pylorus was the same. Mucus ulcers were the combined effects of lowered vitality or damage of the mucous membrane, and increased acidity of the gastric juice; the damage might be by local bacterial infection or toxins acting on the epithelial cells or on the lymphoid follicles, or by local hemorrhage or trauma. The clinical resemblance between mucus ulcer and gastritis was very close, and there might be no distinguishing features between them. Chronic ulcer differed clinically from the older descriptions of this condition, and the patient was nowadays more often a man than a woman. As diagnostic features he emphasized pain, tenderness, and acidity. X-ray examination showed that the motility of the stomach was sometimes enhanced.

The most important part of treatment was rest in bed, accompanied by a diet requiring little motility, and by treatment directed against the acidity—namely, by alkalies. He recommended operative interference if medical treatment failed after two months, if return to work led to recrudescence of the symptoms, if hyperacidity persisted, and if any evidence of stenosis intervened.

Saunders says that the diagnosis was often very difficult, and that all doubtful cases should be treated as though gastric ulceration existed. Rest in bed he considered of first importance; but the old starvation method was futile, and, as he had insisted for twenty years, feeding by the mouth could be started when the patient was first put into bed. Radiography was of limited value.

Clarke says that the most important advance in knowledge of gastric ulcer was the division into acute or mucus and chronic forms. He remarked on the importance of oral sepsis and the diagnosis from cancer.

Dr. William Hunter regarded gastric ulcer as almost invariably due to staphylococcal and streptococcal infection from the mouth. Treatment should be especially directed to the source of infection. Dr. Charles Miller dealt with the histology of the disease. Prof. Vaughan Harley had found hyperchlorhydria in nearly all cases. He emphasized the importance of accurate chemical investigations. Volatile acids were increased only if pyloric spasm or ob-

struction existed, and pepsin was always present in large amount. He believed drugs, especially bismuth subnitrate, were of great use. He considered gastroenterostomy should play no part in the treatment of uncomplicated cases.

Cryptogenic Syphilis.—Lane, in *The London Medical Lancet*, alludes to two cases described by Jullien. Two medical men, a surgeon and his assistant, operated on a woman of thirty-two for a tubercular swelling of the sternum. After excision and scraping they proceeded to sew up the wound. The needle, however, was a blunt one, and the surgeon in trying to force it through the skin wounded himself deeply on the end of the right index finger by a cut which bled somewhat freely. Subsequently the assistant met with a similar mishap, and wounded himself on the same finger. In both instances the puncture was healed in three or four days. On dressing the patient's wound for the first time eight days later they observed a slight ulceration with red edges at the seat of each suture, which suggested the possibility of syphilis to them, and on the following day a general macular eruption manifested itself on the patient. On examining her genital organs a healing chancre was discovered on a level with the fourchette and also some enlarged inguinal glands.

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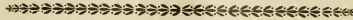
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The following directions are suggested for the benefit of those who may forward material for examination.

All specimens should be accompanied by a brief note descriptive of the clinical condition and a special reference to the character of the examination desired.



The Main Building Front View.



Seventh Street Entrance.

The name and address of the person to whom the report is to be sent should be clearly indicated.

Sputum—should be sent in a clean, wide-mouthed bottle. The ordinary vaseline bottle answers all purposes. The morning sputum is preferable. That expectorated during meal time should not be included.

Blood For Widal Test.

— After carefully washing, prick the lobule of the ear or the tip of the finger. The first drop of blood should be wiped away. Two large drops are then placed on a glass slide, one near either end, and allowed to dry without being spread out on the surface of the slide. After they have dried, the

allowed to dry without being spread out on the surface of the slide.

slide is carefully placed in a clean envelope and box, and then mailed to the laboratory.

Second Method.—

Collect three or four drops of blood in a capillary tube; then seal tube over gas or other flame and send to the laboratory. (Capillary tubes will be sent upon application to the laboratory.) Blood for malarial parasites differential count, etc., should be sent to the laboratory on glass slides. As thin a smear as possible should be made.

Smears For The Detection of Gonococci.—

One drop of purulent discharge from the urethra should be placed at one end of a clean slide and a thin smear made over the surface of the slide.

In collecting a specimen from a female patient, care should be taken to obtain the drop of material directly from the seat of the discharge. This should be done with a sterile swab or other instrument. Two smears should always be sent to the laboratory.



Clinical Laboratory, Showing Autoclave, Hood, Operating Tables, Etc.

eration or autopsy should be wrapped in gauze moistened with salt solution surrounded by oiled paper or rubber protective. When it is not possible for material to reach the laboratory within twenty-four hours it should be placed in alcohol (80 per cent) or formalin solution (10 per cent.) Small fragments of tissue and the material from uterine curettage should be preserved always.

Tumors.—can be sent by mailing in wide mouthed specimen jars. They should rest upon a pad of absorbent cotton, which is placed in the bottom of the jar before



Clinical Laboratory, Showing Arrangement of Desks, Microscopes, Microtomes, Incubator, Centrifuge, Etc

Urine.—for bacteriological examination should always be catheterized directly into a bottle that has been rendered sterile by boiling 15-20 minutes. No chloroform or other preservative should be added. When sending a specimen of urine to the laboratory, always mark it with the date, the name of the patient and of the physician for identification, and specify whether a chemical or bacteriological examination, or whether Ehrlich's diazo test for typhoid fever is desired. The quantity should not be less than four ounces.

Pathological—

material from either op-

the tumoris dropped in

Feces.—should be sent in a clean, wide mouthed bottle. A large sterilized screw capped bottle will answer the purpose.

Wasserman's Test.—Since the advent of the discovery of 606 for the cure of Syphilis, the employment of [the Wasserman test, both before and after its use, is conceded by all scientific investigators to be of the highest importance as a control to the curative effect of this remedy. The Charlotte Sanatorium Laboratory is specially equipped for carrying out this Wasserman Sero-diagnosis test for Syphilis.



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Specimens sent to the laboratory for this test should be obtained as follows.

1st. By using an ordinary antitoxin syringe, and withdrawing the blood directly from the median basilic vein, as represented in Fig. 1 illustrates tourniquet applied, taken the blood from the vein by means of the syringe.



Clinical Laboratory, With Hot Air Sterilizer, Scales, Lavatory, Etc.

to coagulate, cork, pack and mail as any other fragile package. At least two C. C. should be withdrawn for this test. The syringe tubes, etc., should be clean and perfectly dry. It is the best, if possible, for patient to go to the laboratory and have the director of that department secure for himself the specimen of blood.

Milk.—The bacteriological examination of milk, requires certain precautions in the collection of the sample. Special instructions and proper containers will be sent upon application.

Stomach Contents.—should be sent in a sterilized bottle. A large vaseline or quinine bottle usually answers the purpose.

2nd. By means of capillary attraction, as illustrated in Fig. 11 represents empty capsule; tourniquet applied to finger. It is best to apply constriction to middle finger, and puncture the dorsal surface of the last joint of this finger rather close to nail with a sterile, and collect blood, as illustrated in Fig. 11.

After obtaining blood if capsule is used, as is shown in Fig. 11, simply place the curved end over a flame of a Bunsen Burner, alcohol lamp, or ordinary gas jet to seal same, and mail. If syringe or other means are employed, put blood in small test tube, allow



Fig I.



Fig II.

swab 50 Bacterial Cultures 1.00 Sterilized solution.. 5.00 Spinal Puncture and Analysis 5.00

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pertusis, phthisis and pneumonia, markedly so in old or feeble people. The writer has come after extended use of it, to rely upon it almost exclusively in old people.—From Nov. issue Mass. Medical Journal.

Classical Training and the Physician.

H. D. Rolleston ventures the opinion that, valuable as a really good classical training is in some respect and attractive as its advantages are in brilliant exceptions, the bulk of medical men pay somewhat dearly for the luxury of any aroma of classical culture which still clings to them in late middle life to compensate for the years spent at school and sometimes at the University on the dead and difficult languages. A large proportion of medical men have almost entirely forgotten the Greek they once knew, or at most can recall just enough to understand and spell the never-ending flow of new and often unnecessary medical words, some of which bear witness to their inventors' originality in being composed of the Greek termination it is appended to a Latin noun or even a comparatively modern name; such are Bartholinitis and Wirsungitis. Latin is more familiar, but largely because prescriptions are still supposed to be concealed from the public by garb of Latin words often discreetly and somewhat illegibly abbreviated. It may safely be concluded that to the ordinary medical man the direct or marketable advantage of a classical training is entirely out of proportion to the amount of time commonly devoted to it. But it is often urged that, apart from any intrinsic use, the classical languages, in virtue of their peculiar structure, give a mental training and discipline which cannot be obtained from the study of French and German. This statement is difficult to prove, and we have the high authority of Sir Clifford Allbutt for the dicta that "it is not so much what a man is taught as how he is taught it," and that "the current teaching of Greek and Latin is a parody of education; not only does it restrict the range of the teacher and pupil, but the imaginations of both are stunted." After nearly 20 years' experience as a master at Eton, A. C. Benson frankly characterizes the results of the classical routine as "intellectual starvation." In spite of what has been said about the drawbacks of a prolonged and exclusively classical education, this decision is probably beneficial as regards the elementary education of future medical students, for there is much to be said in favor of retaining the classical languages so long as the teaching of French and German and science is not interfered with or delayed.—The London, Lancet.

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Frequently a slight opalescence produced in the urine on boiling is interpreted to mean the presence of albumin, yet it is quite possible that other precipitations may explain this appearance, and further tests, not often performed in the routine of insurance examinations, are necessary. Huismans tells of an applicant who was accepted at much higher rates than his age demanded, some fifteen years ago, because of the "slight trace of albumin" found in the urine. Fifteen years later this patient was examined by the author and no albumin was found, but a somewhat deceptive precipitation of crystals instead. Moreover trace of albumin have been found in quite healthy person unusual circumstances, e. g. after a prolonged march in soldiers, soon after very cold baths, during menstrual periods in women, after sexual excesses, etc. Orthostatic albuminuria, too, is not a very rare occurrence, and its significance not fully understood. Such persons should be insured, though a higher rate may be advisable.

He tells of another case in whose urine albumin was always found by another physician, while Huismans could discover none. Finally, he learned that the other physician happened to have samples of urine passed by the patient after fairly long bicycle rides, and the physical exertion may have accounted for the appearance of albumin. He warns, against using very delicate reagents, such as Spiegelg', for most normal urines will show very faint traces of albumin with such reagents. The simple test by boiling and addition of nitric

acid is probably the most dependable, for this is not very delicate and does away almost completely with the possibility of mistaken phosphates for albumin. The use of Esbach's reagent is somewhat dangerous, unless great care is used in examining the sediment. Crystals made up of picric acid of the reagent and certain elements of the urine which are deposited at the bottom of the albuminometer should not be mistaken for a precipitate of albumin.

If a patient in whom albumin has been found appears again for examination, other symptoms should be looked for to judge the significance of the albuminuria. The heart must be examined for hypertrophy, the second aortic sound for accentuation, and blood pressure should be carefully measured. Great importance should be attached to increase of blood pressure; if ten years or more after albumin has been found in the urine the blood pressure of a patient is not found increased, the interpretation of the urinary findings may be much less grave than otherwise.—Blatter für Vertrauensärzte der Lebensversicherung.

Chronological Relations of Ovulation and Menstruation.

Busquet in considering the chronological relation of ovulation and menstruation, cites the observations of Leopold and Kufferth, who examined the ovaries of women operated on during menstruation, and during the intermenstrual period, with reference to the presence of the corpus luteum. They found that the menstruation occurred at the moment of maturity and rupture of the maturity and rupture of the ovisac. Pouhet has published a case of unique coitus in which the act occurred fifteen days after menstruation and fecundation occurred. Fraenkel was of opinion that one of the results of the internal secretion of the corpus luteum was to cause menstruation. In nine cases of laparotomy with healthy ovaries he cauterized the corpus luteum and prevented the next menstruation. Villemin found that the cycle occurs thus: the Garafian ruptures midway between the menstrual periods; twelve to fifteen days afterwards the corpus luteum is present and menstruation occurs. Conclusions are that menstruation is a hemorrhage caused by the corpus luteum fourteen to fifteen days after ovulation. This question could be decided if surgeons would systematically examine the follicles of all women on whom laparotomy is done, in connection with the date of the last menstruation.—La Presse Medicale,

